

Environmental Product Declaration (EPD)



Declaration code: EPD-VET-GB-67.0



Viega GmbH
& Co. KG

Drainage technology

Waste water systems



Basis:

DIN EN ISO 14025
EN 15804 + A2

Company EPD
Environmental
Product Declaration

Publication date:
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25.02.2030






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Declaration holder	Viega GmbH & Co KG Viega Platz 1 57439 Attendorn, Germany www.viega.de		
Declaration code	EPD-VET-GB-67.0		
Designation of declared product	Waste water systems		
Scope	Drainage technology includes various drainage solutions for bathrooms, basements, kitchens and outdoor areas.		
Basis	This EPD was prepared on the basis of EN ISO 14025:2011 and DIN EN 15804:2012+A2:2019. In addition, the "Allgemeiner Leitfaden zur Erstellung von Typ II Umweltproduktdeklarationen" (Guidance on preparing Type III Environmental Product Declarations) applies. The Declaration is based on the PCR Documents "PCR Part A" PCR-A-1.0:2023 and "Drainage technology" PCR-ET-1.0:2023		
Validity	Publication date: 25.02.2025	Last revision: 31.03.2026	Valid until: 25.02.2030
	This verified Company Environmental Product Declaration (company EPD) applies solely to the specified products and is valid for a period of five years from the date of publication in accordance with DIN EN 15804.		
LCA basis	The LCA was prepared in accordance with DIN EN ISO 14040 and DIN EN ISO 14044. The base data includes the data collected at two production plants of Viega GmbH & Co KG, and the generic data derived from the Ecoinvent 3 data base (v3.10.1, 28.11.2023) and Ecoinvent EN 15804. LCA calculations were carried out for the included "cradle to grave" including all upstream chains (e.g. raw material extraction, etc.)		
Notes	The ift-Guidance Sheet "Conditions and Guidance for the Use of ift-Test Documents" applies. The declaration holder assumes full liability for the underlying data, certificates and verifications.		
			
	Christoph Seehauser Deputy Head for Sustainability	Dr. Torsten Mielecke Chairman of Expert Committee ift-EPD and PCR	Prof. Dr. Eric Brehm External verifier

1 General product information

Product definition

The EPD relates to the product group Drainage technology and applies to:

1 pc Drainage technology of company Viega GmbH & Co KG

They are subdivided into following product groups:

Product group (PG):		Weight in kg ¹
PG1	Backwater valves	0.421 – 10.450
PG2	Bathroom and balcony drains	0.165 – 2.232
PG3	Floor and cellar drains	0.375 – 1.608
PG4	Shower channels	0.330 – 6.200
PG5	Grates for shower channels	0.122 – 2.362
PG6	Accessories	0.004 – 1.600
PG7	Drains for bathtubs and shower trays	0.010 – 27.090
PG8	Drains for sinks, spouts and appliances	0.006 – 1.236
PG9	Drains for urinals	0.040 – 0.570
PG10	Drains for washbasins and bidets	0.029 – 11.800
PG11	Electronic mixing unit	0.066 – 7.005

¹ The respective weights [kg/piece] are to be taken from the conversion table in Annex B in accordance with PCR Part B.

Table 1 Product groups

The declared unit is obtained by summing up:

PG	Assessed product ²	Weight in kg ²	Declared unit
PG1	Backwater valves	6.40	1 pc
PG2	Bathroom and balcony drains	1.59	1 pc
PG3	Floor and cellar drains	1.55	1 pc
PG4	Shower channels	3.43	1 pc
PG5	Grates for shower channels	2.36	1 pc
PG6	Accessories	1.60	1 pc
PG7	Drains for bathtubs and shower trays	27.05	1 pc
PG8	Drains for sinks, spouts and appliances	0.39	1 pc
PG9	Drains for urinals	0.46	1 pc
PG10	Drains for washbasins and bidets	0.60	1 pc
PG11	Electronic mixing unit	1.76	1 pc

² Representative average products were determined for each product group across several associated products.

Table 2 Functional unit per reference product

Averaging is explained in the background report.

The average unit is declared as follows:

Directly used material flows are determined using the masses produced (kg) and assigned to the declared unit. All other inputs and outputs in the production were scaled to the declared unit in their entirety since no typical functional unit was available due to the great diversity of variants. The reference period is the year 2023.

The validity of the EPD is restricted to the systems listed in Table 1 (associated products in Annex B).

Product description

Backwater valves (including Sperrfix)

Backwater valves for faecal and faecal-free wastewater. Various mechanical and electronic equipment variants.

Bathroom and balcony drains

Bathroom and balcony drains with system dimension 100 and accessories for draining different volumes of water. Various installation heights, connection, material and design variants.

Floor and cellar drains

Floor and cellar drains with system dimension 145 and accessories for draining large volumes of water. Various installation heights, connection, material and design variants.

Shower channels

Shower channels and accessories for bathroom drainage. For compound seal (tiled shower) with sealing mat and installation adhesive. For wall and floor mounting. Installation heights from 0 to 200 mm. Different material and design variants.

Grates for shower channels

Grates for shower channels in different lengths. Different material and design variants.

Accessories

Spare parts for shower channels, drains and backwater valves.

Drains for bathtubs and shower trays

Inlets, drains and overflows made of polypropylene (PP) and accessories for bathtubs and shower trays.

Drains for sinks, spouts and appliances

Drains, drain traps and accessories for sinks, spouts and appliances. Various flush-mounted, surface-mounted, material and design variants.

Drains for urinals

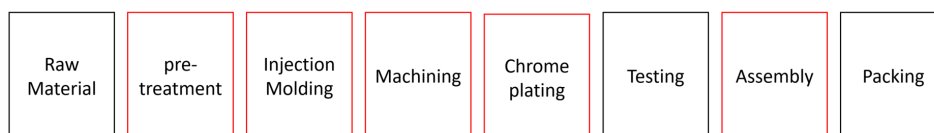
Drains and accessories for toilets. Drains, drain traps and accessories for urinals. Various wall, stand and material variants.

Drains for washbasins and bidets

Drains, drain traps and accessories for washbasins and bidets. Various flush-mounted, surface-mounted, material and design variants.

Electronic mixing unit

Electronically controlled mixing unit for filling a bathtub. For use with drain and overflow sets with water inlet.

Product manufacture

does not apply to all items

Note: Depending on the product type, not all production steps are carried out.

Scope

Drainage technology includes various drainage solutions for bathrooms, basements, kitchens and outdoor areas.

Management systems

The following management systems are held:

- Quality management system as per DIN EN ISO 9001:2015
- Energy management system as per DIN EN ISO 50001:2018
- Environmental management systems as per DIN EN ISO 14001:2015
- Occupational health and safety management system as per DIN EN ISO 45001:2018

Additional information

For additional verifications of applicability or conformity refer to the CE marking and the documents accompanying the product, if applicable.

2 Materials used**Primary materials**

The raw materials used can be found in Section 6.2 Life cycle inventory.

Declarable substances

It may contain substances according to the REACH candidate list. Further information on listed substances and the corresponding SCIP number are available on request from the manufacturer.

All relevant safety data sheets are available from Viega GmbH & Co KG.

3 Construction process stage**Processing recommendations, installation**

Observe the instructions for mounting/installation, operation, maintenance and disassembly, provided by the manufacturer. For this, see www.viega.de

4 Use stage**Emissions to the environment**

There are no known emissions to water and soil. A test report for the assessment of emissions of Volatile Organic Compounds (VOC) using a mixed sample according to ISO 16000 is available for drainage technology. Test results were taken into account in the life cycle assessment (see Annex/B1).

The other products do not come into contact with indoor air. There are no known emissions to indoor air.

Reference service life (RSL)

The RSL information was provided by the manufacturer. The RSL must be established under specified reference conditions of use and relate to the declared technical and functional performance of the product within the building. It must be determined according to all specific rules given in European product standards or, if none are available, according to a c-PCR. It must also take into account ISO 15686-1, -2, -7 and -8. If there is guidance on deriving RSLs from European Product Standards or a c-PCR, then such guidance must take precedence.

If it is not possible to determine the service life as the RSL in accordance with ISO 15686, the BBSR table "Nutzungsdauer von Bauteilen zur Lebenszyklusanalyse nach BNB" (service life of building components for life cycle assessment in accordance with the sustainable construction evaluation system) can be used. For further information and explanations refer to www.nachhaltigesbauen.de.

For this EPD the following applies:

For a "cradle to grave" EPD and Module D (A + B + C + D), a reference service life (RSL) must be specified.

According to the manufacturer, a 50-year service life has been specified for the Waste water systems of company Viega GmbH & Co KG.

The service life depends on the characteristics of the product and the terms of use.

The reference service life is for the features, which are reported in this EPD or the relevant references for this purpose.

The RSL does not reflect the actual life time, which is usually determined by the service life and the redevelopment of a building. It represents no statement about service life, guarantee of performance or promise of guarantee.

5 End-of-life stage**Possible end-of-life stages**

The Waste water systems are fed to central collection points. There the products are usually shredded and sorted into their constituents. The end-of-life stage depends on the site where the products are used and is therefore subject to the local regulations. Observe the locally applicable regulatory requirements.

This EPD shows the end-of-life modules according to the market situation.

Metal, plastics and electronic components are recycled to certain parts. Residual fractions of plastics are thermally recycled. Other residual fractions are sent to landfill.

Disposal routes

The average disposal routes were taken into account in the LCA.

All life cycle scenarios are detailed in the Annex.

6 Life Cycle Assessment (LCA)

Environmental product declarations are based on life cycle analyses (LCAs) which use material and energy flows for the calculation and subsequent representation of environmental impacts.

As a basis for this, life cycle assessments were prepared for Waste water systems. These LCAs are in conformity with the requirements set out in DIN EN 15804 and the international standards DIN EN ISO 14040, DIN EN ISO 14044 and EN ISO 14025 as well as based on ISO 21930.

The LCA is representative of the products presented in the Declaration and the specified reference period.

6.1 Definition of goal and scope

Goal

The goal of the LCA is to demonstrate the environmental impacts of the products. In accordance with DIN EN 15804, the environmental impacts covered by this Environmental Product Declaration are presented for the entire product life cycle in the form of basic information. Apart from these, no other environmental impacts have been specified.

Data quality, data availability and geographical and time-related system boundaries

The specific data originate exclusively from the 2023 fiscal year. They were collected on-site at the plant located in Elpse and originate in parts from company records and partly from values directly obtained by measurement. Primary data was collected from the company's own data management system for energy, water and packaging costs as well as for auxiliary materials and waste/offcuts. Secondary data from literature sources was used for waste recycling (routes).

The generic data originate from the Ecoinvent 3 data base in current version (v3.10.1, 28.11.2023). Ecoinvent EN 15804 was used as a supplement for the LCIA indicators. The data was last updated in 2023. The data is not older than 1 year, as indicated in the ILCD field. No other generic data were used for the calculation.

Generic data are selected as accurately as possible in terms of geographic reference. If no country-specific data sets are available or if the regional reference cannot be determined, European or globally valid data sets are used.

Data gaps were either filled with comparable data or conservative assumptions, or the data were cut off in compliance with the 1% rule.

The software system "Umberto 11" (version 11.12.1) was used to model the life cycle.

The data quality complies with the requirements of prEN 15941:2022.

Scope / System boundaries The system boundaries refer to the supply of raw materials and purchased parts, manufacture/production, use and end-of-life stage of Waste water systems. No additional data from pre-suppliers/subcontractors or other sites were taken into consideration.

Cut-off criteria All company data collected, i.e. all commodities/input and raw materials used, the thermal energy and electricity consumption, were taken into consideration.

The boundaries cover only the product-relevant data. Building sections/parts of facilities that are not relevant to the manufacture of the products, were excluded.

The transport distances of the pre-products used were taken into consideration as a function of 100% of the mass of the products. Drainage technology is transported exclusively by a >32 t truck / semitrailer, EURO 6, diesel, 53% capacity utilization.

Other transportation routes were not taken into account as they are either marginal, have no relevant impact on the balance sheets or were not recorded.

The transportation routes of the waste materials to the recycling site are not taken into account.

The criteria for the exclusion of inputs and outputs as set out in DIN EN 15804 are fulfilled. From the data analysis it can be assumed that the total of negligible processes per life cycle stage does not exceed 1% of the mass/primary energy. This way the total of negligible processes does not exceed 5% of the energy and mass input. The life cycle calculation also includes material and energy flows that account for less than 1%.

6.2 Life cycle inventory

Goal All material and energy flows are described below. The processes covered are presented as input and output parameters and refer to the declared units.

Life cycle stages The complete life cycle of Waste water systems is shown in the annex. The product stage "A1 – A3", construction process stage "A4 – A5", use stage "B1 – B7", end-of-life stage "C1 – C4" and the benefits and loads beyond the system boundaries "D" are considered.

Benefits The below benefits have been defined as per DIN EN 15804:

- Benefits from recycling
- Benefits (thermal and electrical) from incineration

Allocation of co-products

Allocations occur during production.

Since the allocations in relation to the economic value through the co-products is less than 25 percent, the inputs and outputs of the system were allocated between their different products or functions in such a way that the underlying physical relationships (pieces) between them are reflected.

Changes in the inherent properties of the materials were taken into account. The respective recycling processes and their assumptions are taken into account in the balance sheet.

Allocations for re-use, recycling and recovery

If the products are reused/recycled and recovered during the product stage (rejects), the elements are shredded, if necessary and then sorted into their constituents. This is done by various process plants, e.g. magnetic separators.

The system boundaries were set following their disposal, reaching the end-of-waste status.

Allocations beyond life cycle boundaries

The use of recycled materials in the manufacturing process was based on the current market-specific situation. In parallel to this, a recycling potential was taken into consideration that reflects the economic value of the product after recycling (recyclate).

The system boundary set for the recycled material refers to collection.

Secondary material

The use of secondary material by Viega GmbH & Co KG was considered in Module A3. Secondary material is not used.

Inputs

The following manufacturing-related inputs were included in the LCA:

Energy

The electricity mix is based on "electricity, high voltage (DE, production mix)." "Compressed air, 1,000 kPa gauge, RoW, production" was assumed for the electricity consumption of compressed air and "cooling energy, GLO, market" for the electricity consumption of the cooling system.

A portion of the process heat is used for space heating. This can, however, not be quantified and a "worst case" figure was taken into account for the product.

Water

There is no water consumption in the individual process steps for production.

Raw material/pre-products

The chart below shows the share of raw materials/pre-products in %.

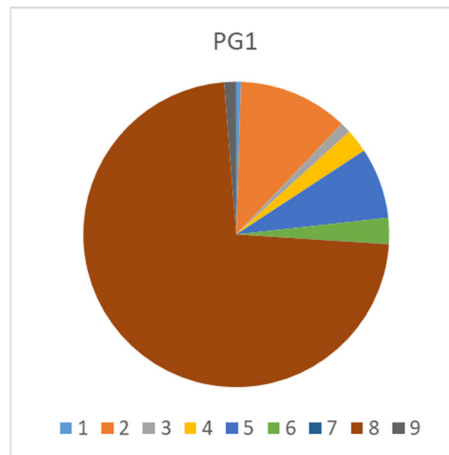


Illustration 1 Percentage of individual materials per declared unit of product group 1 (PG1)

No.	Material	Mass in %
1	Electronics	0.50%
2	Motor	11.62%
3	POM	1.13%
4	Gunmetal	2.50%
5	Stainless steel	7.50%
6	Brass	2.75%
7	Steel	0.03%
8	PP	72.70%
9	EPDM	1.28%

Table 3 Presentation of the individual materials per declared unit of product group 1 (PG1)

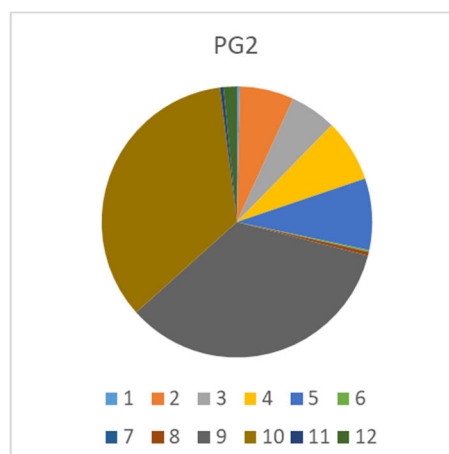


Illustration 2 Percentage of individual materials per declared unit of product group 2 (PG2)

No.	Material	Mass in %
1	Copper	0.33%
2	ABS	6.48%
3	POM	5.55%
4	PA	7.45%
5	Stainless steel	8.53%
6	Nickel	0.19%
7	Silicone	0.03%
8	EPDM	0.45%
9	Polyvinyl chloride	34.37%
10	PP	34.62%
11	Color FK	0.40%
12	LDPE	1.60%

Table 4 Presentation of the individual materials per declared unit of product group 2 (PG2)

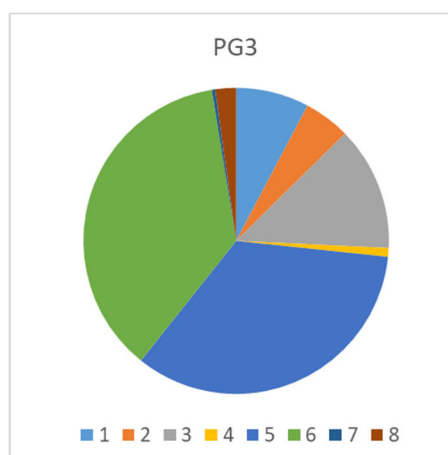


Illustration 3 Percentage of individual materials per declared unit of product group 3 (PG3)

No.	Material	Mass in %
1	Mineral wool	7.74%
2	TPE	4.90%
3	Stainless steel	13.10%
4	EPDM	0.92%
5	Polyvinyl chloride	34.05%
6	PP	36.73%
7	Color FK	0.36%
8	LDPE	2.19%

Table 5 Presentation of the individual materials per declared unit of product group 3 (PG3)

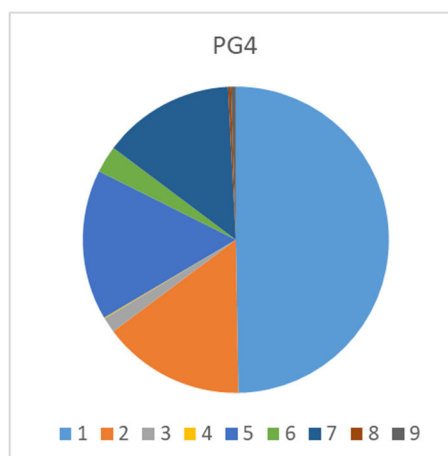


Illustration 4 Percentage of individual materials per declared unit of product group 4 (PG4)

No.	Material	Mass in %
1	PA	49.74%
2	Adhesive	15.05%
3	Stainless steel	1.62%
4	Silicone	0.09%
5	Steel	15.89%
6	EPDM	2.85%
7	PP	13.94%
8	Color FK	0.31%
9	LDPE	0.51%

Table 6 Presentation of the individual materials per declared unit of product group 4 (PG4)

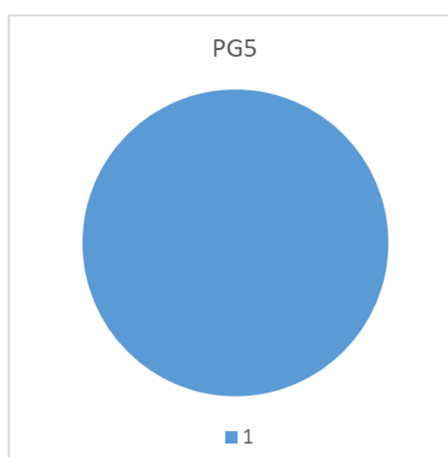


Illustration 5 Percentage of individual materials per declared unit of product group 5 (PG5)

No.	Material	Mass in %
1	Stainless steel	100.00%

Table 7 Presentation of the individual materials per declared unit of product group 5 (PG5)

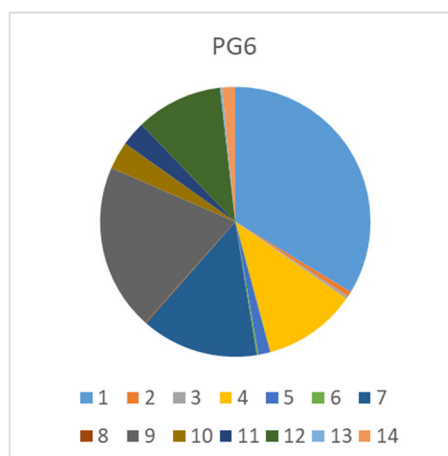


Illustration 6 Percentage of individual materials per declared unit or product group 6 (PG6)

No.	Material	Mass in %
1	Foam	33.70%
2	TPE	0.63%
3	CU	0.33%
4	ABS	11.18%
5	PA	1.43%
6	Nickel	0.19%
7	Stainless steel	14.01%
8	Silicone	0.14%
9	Steel	19.92%
10	EPDM	3.32%
11	Polyvinyl chloride	2.95%
12	PP	10.39%
13	Color FK	0.23%
14	LDPE	1.58%

Table 8 Presentation of the individual materials per declared unit of product group 6 (PG6)

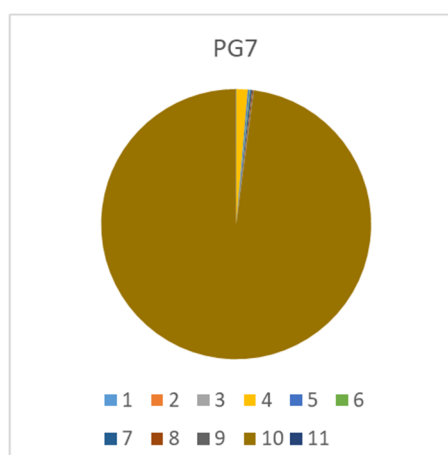


Illustration 7 Percentage of individual materials per declared unit of product group 7 (PG7)

No.	Material	Mass in %
1	CU	0.01%
2	Silicone	0.00%
3	Nickel	0.01%
4	Brass	1.36%
5	Stainless steel	0.18%
6	PA	0.10%
7	EPDM	0.20%
8	POM	0.14%
9	ABS	0.09%
10	PP	97.87%
11	Color FK	0.03%

Table 9 Presentation of the individual materials per declared unit of product group 7 (PG7)

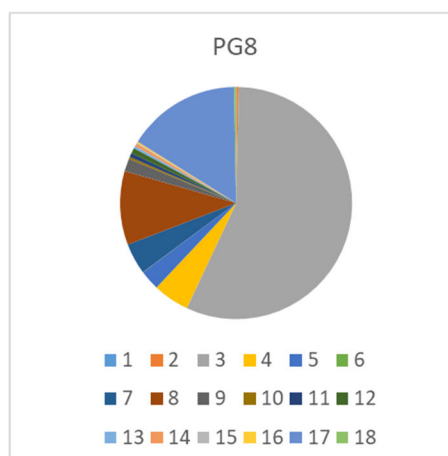


Illustration 8 Percentage of individual materials per declared unit of product group 8 (PG8)

No.	Material	Mass in %
1	Fibre	0.06%
2	Foam	0.29%
3	Gunmetal	56.64%
4	CU	5.05%
5	Silicone	2.78%
6	Nickel	0.04%
7	Brass	4.33%
8	Stainless steel	10.26%
9	HDPE	1.78%
10	EVAC	0.29%
11	PA	0.57%
12	EPDM	0.76%
13	TPE	0.34%
14	Polyvinyl chloride	0.42%
15	POM	0.10%

16	ABS	0.18%
17	PP	15.85%
18	Color FK	0.28%

Table 10 Presentation of the individual materials per declared unit of product group 8 (PG8)

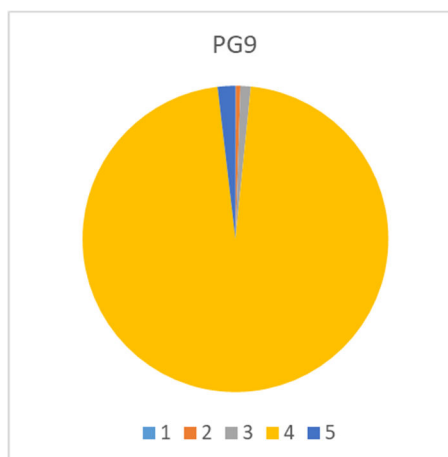


Illustration 9 Percentage of individual materials per declared unit of product group 9 (PG9)

No.	Material	Mass in %
1	Silicone	0.04%
2	Brass	0.48%
3	EPDM	1.09%
4	PP	96.52%
5	Color FK	1.87%

Table 11 Presentation of the individual materials per declared unit of product group 9 (PG9)

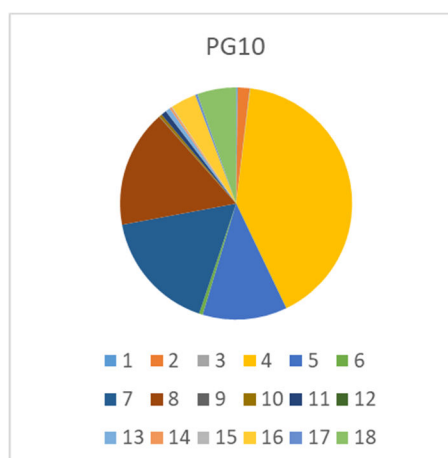


Illustration 10 Percentage of individual materials per declared unit of product group 10 (PG10)

No.	Material	Mass in %
1	Fibre	0.22%
2	Polystyrene	1.66%
3	Foam	0.08%
4	Gunmetal	40.93%
5	CU	11.79%
6	Nickel	0.50%
7	Brass	16.90%
8	Stainless steel	16.37%
9	Steel	0.07%
10	EVAC	0.38%
11	PA	0.75%
12	SBR	0.02%
13	EPDM	0.65%
14	TPE	0.28%
15	Polyvinyl chloride	0.12%
16	PP	3.56%
17	Color FK	0.33%
18	HDPE	5.41%

Table 12 Presentation of the individual materials per declared unit of product group 10 (PG10)

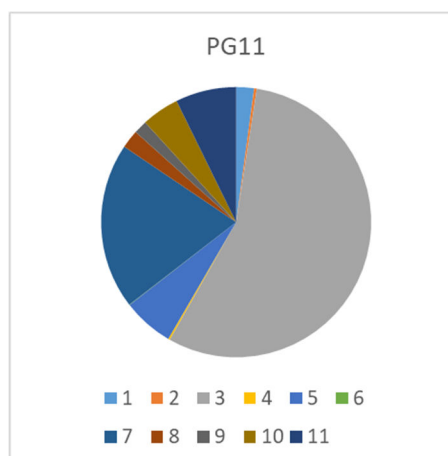


Illustration 11 Percentage of individual materials per declared unit of product group 11 (PG11)

No.	Material	Mass in %
1	EPDM	2.13%
2	Stainless steel	0.33%
3	Brass	55.75%
4	Nickel	0.19%
5	Sealing compound (resin and hardener)	6.11%
6	Motor	0.04%
7	Rechargeable battery	19.90%
8	Steel	2.19%
9	HDPE	1.60%
10	CU	4.49%
11	Foam	7.28%

Table 13 Presentation of the individual materials per declared unit of product group 11 (PG11)

Ancillary materials and consumables

There are no significant quantities of ancillary materials and consumables.

Product packaging

The amounts used for product packaging are as follows:

Product group		Mass in kg			
		Plastic films	Plywood	Paper/ cardboard	Wood - pallet
1	Backwater valve	0.020	-	0.020	-
2	Bathroom and balcony drains	0.019	-	0.369	-
3	Floor and cellar drains	0.020	-	0.467	-
4	Shower channel	0.136	-	2.139	-
5	Grates for shower channels	0.012	-	0.995	-
6	Accessories	0.024	0.195	0.145	-
7	Drains for bathtubs & shower trays	0.018	-	0.663	-
8	Drains for sinks, spouts & appliances	0.016	-	0.038	-
9	Drains for urinals	0.022	-	0.044	-
10	Drains for washbasins & bidet	0.147	-	0.065	-
11	Electronic mixing unit	0.078	-	2.199	-

Table 14 Weight in kg of packaging per declared unit

Biogenic carbon content

Only the biogenic carbon content of the associated packaging is specified, as the total mass of substances containing biogenic carbon is less than 5% of the total mass of the product and associated packaging. According to EN 16449, packaging produces the following amounts of biogenic carbon:

Product group		Content in kg C per pc
		In the associated packaging
1	Backwater valves	0.007
2	Bathroom and balcony drains	0.132
3	Floor and cellar drains	0.168
4	Shower channels	0.768
5	Grates for shower channels	0.357
6	Accessories	0.139
7	Drains for bathtubs and shower trays	0.238
8	Drains for sinks, spouts and appliances	0.014
9	Drains for urinals	0.016
10	Drains for washbasins and bidets	0.023
11	Electronic mixing unit	0.790

Table 15 Biogenic carbon content in product and packaging at the factory gate

Outputs

The LCA includes the following production-relevant outputs:

Waste

Secondary raw materials were included in the benefits. See Section 6.3 - Impact assessment.

Waste water

The manufacture does not produce any waste water.

6.3 Impact assessment

Goal

The impact assessment covers inputs and outputs. The impact categories applied are named below:

Core indicators

The models for impact assessment were applied as described in DIN EN 15804+A2.

The impact categories presented as core indicators in the EPD are as follows:

- Climate change - total (GWP-t)
- Climate change - fossil (GWP-f)
- Climate change - biogenic (GWP-b)
- Climate change - land use & land use change (GWP-l)
- Ozone depletion (ODP)
- Acidification (AP)
- Eutrophication freshwater (EP-fw)
- Eutrophication salt water (EP-m)
- Eutrophication land (EP-t)
- Photochemical ozone creation (POCP)
- Depletion of abiotic resources - fossil fuels (ADPF)
- Depletion of abiotic resources - minerals and metals (ADPE)
- Water use (WDP)

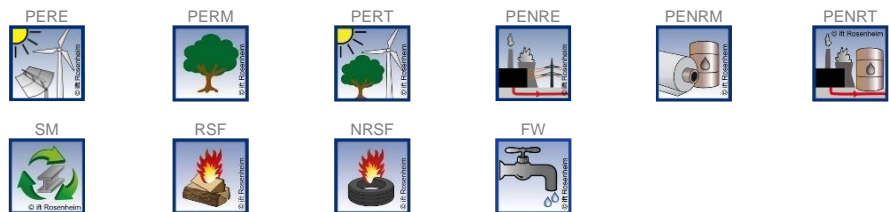


Use of resources

The models for impact assessment were applied as described in DIN EN 15804-A2.

The following resource use indicators are presented in the EPD:

- Renewable primary energy as energy source (PERE)
- Renewable primary energy for material use (PERM)
- Total use of renewable primary energy (PERT)
- Non-renewable primary energy as energy source (PENRE)
- Renewable primary energy for material use (PENRM)
- Total use of non-renewable primary energy (PENRT)
- Use of secondary materials (SM)
- Use of renewable secondary fuels (RSF)
- Use of non-renewable secondary fuels (NRSF)
- Net use of freshwater resources (FW)



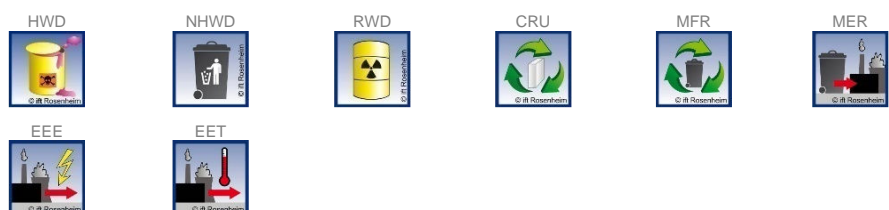
Waste

The waste generated during the production of surface temperature control is evaluated and shown separately for the fractions trade wastes, special wastes and radioactive wastes. Since waste handling is modelled within the system boundaries, the amounts shown refer to the deposited wastes. A portion of the waste indicated is generated during the manufacture of the pre-products.

The models for impact assessment were applied as described in DIN EN 15804-A2.

The waste categories and indicators for output material flows presented in the EPD are as follows:

- Disposed hazardous waste (HWD)
- Non-hazardous waste disposed (NHWD)
- Radioactive waste disposed (RWD)
- Components for re-use (CRU)
- Materials for recycling (MFR)
- Materials for energy recovery (MER)
- Exported electrical energy (EEE)
- Exported thermal energy (EET)

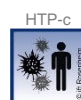
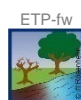
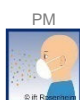


Additional environmental impact indicators

The models for impact assessment were applied as described in DIN EN 15804-A2.

The additional impact categories presented in the EPD are as follows:

- Particulate matter emissions (PM)
- Ionizing radiation, human health (IRP)
- Ecotoxicity – freshwater (ETP-fw)
- Human toxicity, carcinogenic effects (HTP-c)
- Human toxicity, non-carcinogenic effects (HTP-nc)
- Impacts associated with land use/soil quality (SQP)



ift ROSENHEIM	Results per 1 pc PG1 - Backwater valves															
	Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Core indicators																
GWP-t	kg CO ₂ eq.	43.50	0.41	9.15E-02	0.00	0.00	0.00	0.00	0.00	15.00	0.00	4.75E-02	3.38E-02	8.27E-02	0.61	-36.00
GWP-f	kg CO ₂ eq.	43.40	0.41	1.47E-02	0.00	0.00	0.00	0.00	0.00	14.50	0.00	3.24E-03	3.38E-02	6.96E-02	4.15E-02	-36.10
GWP-b	kg CO ₂ eq.	-2.46E-02	1.62E-05	7.68E-02	0.00	0.00	0.00	0.00	0.00	0.51	0.00	4.42E-02	1.08E-06	1.29E-02	0.57	6.73E-02
GWP-l	kg CO ₂ eq.	4.74E-02	1.72E-04	4.31E-07	0.00	0.00	0.00	0.00	0.00	4.41E-02	0.00	9.12E-07	1.37E-05	1.12E-04	1.17E-05	-4.41E-02
ODP	kg CFC-11 eq.	1.75E-06	6.59E-09	5.66E-11	0.00	0.00	0.00	0.00	0.00	2.66E-07	0.00	2.18E-11	5.28E-10	6.55E-10	2.79E-10	-1.20E-06
AP	mol H ⁺ eq.	0.41	1.04E-03	4.14E-05	0.00	0.00	0.00	0.00	0.00	8.50E-02	0.00	1.09E-05	1.41E-04	4.68E-04	1.40E-04	-0.61
EP-fw	kg P eq.	4.94E-02	3.33E-05	1.10E-06	0.00	0.00	0.00	0.00	0.00	1.35E-02	0.00	4.86E-06	2.66E-06	2.71E-05	6.23E-05	-6.31E-02
EP-m	kg N eq.	5.49E-02	2.64E-04	7.40E-05	0.00	0.00	0.00	0.00	0.00	1.33E-02	0.00	9.13E-05	5.13E-05	1.22E-04	1.17E-03	-5.74E-02
EP-t	mol N eq.	0.62	2.85E-03	1.82E-04	0.00	0.00	0.00	0.00	0.00	0.12	0.00	3.39E-05	5.59E-04	1.24E-03	4.35E-04	-0.69
POCP	kg NMVOC-eq.	0.23	1.57E-03	7.64E-05	3.06E-06	0.00	0.00	0.00	0.00	3.94E-02	0.00	2.14E-05	2.05E-04	3.74E-04	2.75E-04	-0.21
ADPF^{*2}	MJ	778.00	6.18	4.17E-02	0.00	0.00	0.00	0.00	0.00	336.00	0.00	2.05E-02	0.49	0.87	0.26	-518.00
ADPE^{*2}	kg Sb eq.	1.15E-02	1.20E-06	1.66E-08	0.00	0.00	0.00	0.00	0.00	1.95E-04	0.00	2.30E-09	9.50E-08	1.23E-06	2.95E-08	-1.33E-02
WDP^{*2}	m ³ world eq. deprived	14.20	2.95E-02	9.06E-04	0.00	0.00	0.00	0.00	0.00	9.16	0.00	2.17E-04	2.37E-03	1.22E-02	2.78E-03	-13.40
Use of resources																
PERE	MJ	65.00	8.12E-02	5.42E-03	0.00	0.00	0.00	0.00	0.00	92.20	0.00	6.37E-04	6.49E-03	9.27E-02	8.17E-03	-59.20
PERM	MJ	65.00	8.12E-02	5.42E-03	0.00	0.00	0.00	0.00	0.00	92.20	0.00	6.37E-04	6.49E-03	9.27E-02	8.17E-03	-59.20
PERT	MJ	65.00	8.12E-02	5.42E-03	0.00	0.00	0.00	0.00	0.00	92.20	0.00	6.37E-04	6.49E-03	9.27E-02	8.17E-03	-59.20
PENRE	MJ	778.00	6.18	4.17E-02	0.00	0.00	0.00	0.00	0.00	336.00	0.00	2.05E-02	0.49	0.87	0.26	-518.00
PENRM	MJ	778.00	6.18	4.17E-02	0.00	0.00	0.00	0.00	0.00	336.00	0.00	2.05E-02	0.49	0.87	0.26	-518.00
PENRT	MJ	778.00	6.18	4.17E-02	0.00	0.00	0.00	0.00	0.00	336.00	0.00	2.05E-02	0.49	0.87	0.26	-518.00
SM	kg	0.72	2.62E-03	1.07E-05	0.00	0.00	0.00	0.00	0.00	5.56E-02	0.00	6.74E-06	2.10E-04	5.18E-04	8.65E-05	-0.51
RSF	MJ	1.58E-02	3.33E-05	1.10E-07	0.00	0.00	0.00	0.00	0.00	4.44E-04	0.00	1.17E-07	2.67E-06	3.60E-05	1.49E-06	-1.22E-02
NRSF	MJ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FW	m ³	0.39	9.03E-04	1.46E-05	0.00	0.00	0.00	0.00	0.00	0.29	0.00	-2.41E-04	7.28E-05	3.42E-04	-3.09E-03	-0.39
Waste categories																
HWD	kg	6.49	1.05E-02	2.08E-04	0.00	0.00	0.00	0.00	0.00	0.85	0.00	5.67E-05	8.38E-04	5.33E-03	7.27E-04	-4.80
NHWD	kg	239.00	0.20	4.23E-02	0.00	0.00	0.00	0.00	0.00	65.80	0.00	0.33	1.55E-02	0.14	4.20	-222.00
RWD	kg	1.01E-03	1.33E-06	3.55E-08	0.00	0.00	0.00	0.00	0.00	2.39E-03	0.00	1.24E-08	1.07E-07	1.39E-06	1.59E-07	-8.57E-04
Output material flows																
CRU	kg	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MFR	kg	6.70E-02	4.61E-05	3.23E-06	0.00	0.00	0.00	0.00	0.00	3.49E-02	0.00	4.00E-07	3.69E-06	0.77	5.12E-06	-6.43E-02
MER	kg	1.48E-04	2.83E-07	1.08E-09	0.00	0.00	0.00	0.00	0.00	4.71E-06	0.00	1.38E-09	2.19E-08	8.38E-08	1.78E-08	-1.07E-04
EE	MJ	0.68	1.12E-03	4.23E-06	0.00	0.00	0.00	0.00	0.00	1.56	0.00	7.08E-06	9.00E-05	6.44E-04	9.08E-05	-0.43

Key:
GWP-t – global warming potential - total **GWP-f** – global warming potential fossil fuels **GWP-b** – global warming potential - biogenic **GWP-l** – global warming potential - land use and land use change
ODP – ozone depletion potential **AP** - acidification potential **EP-fw** - eutrophication potential - aquatic freshwater **EP-m** - eutrophication potential - aquatic marine **EP-t** - eutrophication potential - terrestrial
POCP - photochemical ozone formation potential **ADPF^{*2}** - abiotic depletion potential – fossil resources **ADPE^{*2}** - abiotic depletion potential – minerals&metals **WDP^{*2}** – Water (user) deprivation potential **PERE** - Use of renewable primary energy **PERM** - use of renewable primary energy resources **PERT** - total use of renewable primary energy resources **PENRE** - use of non-renewable primary energy **PENRM** - use of non-renewable primary energy resources **PENRT** - total use of non-renewable primary energy resources
SM - use of secondary material **RSF** - use of renewable secondary fuels **NRSF** - use of non-renewable secondary fuels **FW** - net use of fresh water **HWD** - hazardous waste disposed **NHWD** - non-hazardous waste disposed **RWD** - radioactive waste disposed **CRU** - components for re-use **MFR** - materials for recycling **MER** - materials for energy recovery **EE** - exported energy



Results per 1 pc PG1 - Backwater valves

Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D	
Additional environmental impact indicators																
PM	Disease incidence	2.54E-06	3.98E-08	1.01E-08	0.00	0.00	0.00	0.00	0.00	3.03E-07	0.00	1.47E-10	3.46E-09	9.64E-09	1.88E-09	-2.59E-06
IRP*1	kBq U235 eq.	4.07	5.43E-03	1.68E-04	0.00	0.00	0.00	0.00	0.00	9.29	0.00	5.08E-05	4.36E-04	5.66E-03	6.52E-04	-3.45
ETP-fw*2	CTUe	1,030.00	1.49	0.30	2.50E-05	0.00	0.00	0.00	0.00	60.10	0.00	0.64	0.12	0.58	8.19	-1,180.00
HTP-c*2	CTUh	3.16E-07	2.11E-09	1.06E-10	0.00	0.00	0.00	0.00	0.00	3.44E-08	0.00	6.63E-12	1.69E-10	3.77E-10	8.50E-11	-2.34E-07
HTP-nc*2	CTUh	2.86E-06	4.04E-09	6.27E-09	6.66E-13	0.00	0.00	0.00	0.00	2.54E-07	0.00	3.03E-10	3.26E-10	2.19E-09	3.89E-09	-5.22E-06
SQP*2	dimensionless	276.00	6.08	2.99E-02	0.00	0.00	0.00	0.00	0.00	74.80	0.00	3.83E-02	0.50	0.86	0.49	-289.00

Key:

PM – particulate matter emissions potential **IRP*1** – ionizing radiation potential – human health **ETP-fw*2** - Eco-toxicity potential – freshwater **HTP-c*2** - Human toxicity potential – cancer effects **HTP-nc*2** - Human toxicity potential – non-cancer effects **SQP*2** – soil quality potential

Disclaimers

*1 This impact category deals mainly with the eventual impact of low-dose ionising radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionising radiation from the soil, from radon and from some building materials is also not measured by this indicator

*2 The results of this environmental impact indicator shall be used with care as the uncertainties on these results are high or as there is limited experience with the indicator



Results per 1 pc PG2 - Bathroom and balcony drains

Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Core indicators															
GWP-t	kg CO ₂ eq.	6.78	0.13	1.45	0.00	0.00	0.00	0.00	0.00	0.00	1.18E-02	8.40E-03	4.62E-03	1.48E-02	-3.58
GWP-f	kg CO ₂ eq.	7.25	0.13	1.92E-02	0.00	0.00	0.00	0.00	0.00	0.00	8.03E-04	8.39E-03	4.36E-03	1.01E-03	-3.58
GWP-b	kg CO ₂ eq.	-0.47	4.96E-06	1.43	0.00	0.00	0.00	0.00	0.00	0.00	1.10E-02	2.68E-07	2.50E-04	1.38E-02	7.54E-04
GWP-l	kg CO ₂ eq.	3.93E-03	5.26E-05	2.40E-06	0.00	0.00	0.00	0.00	0.00	0.00	2.26E-07	3.41E-06	5.75E-06	2.84E-07	-3.23E-03
ODP	kg CFC-11 eq.	5.76E-07	2.02E-09	1.05E-10	0.00	0.00	0.00	0.00	0.00	0.00	5.40E-12	1.31E-10	5.11E-11	6.78E-12	-5.59E-08
AP	mol H ⁺ eq.	3.74E-02	3.20E-04	2.99E-04	0.00	0.00	0.00	0.00	0.00	0.00	2.71E-06	3.49E-05	4.28E-05	3.40E-06	-8.13E-02
EP-fw	kg P eq.	1.96E-03	1.02E-05	1.12E-05	0.00	0.00	0.00	0.00	0.00	0.00	1.20E-06	6.60E-07	2.06E-06	1.51E-06	-6.37E-03
EP-m	kg N eq.	6.45E-03	8.09E-05	6.96E-04	0.00	0.00	0.00	0.00	0.00	0.00	2.26E-05	1.27E-05	1.04E-05	2.85E-05	-5.36E-03
EP-t	mol N eq.	5.97E-02	8.75E-04	1.49E-03	0.00	0.00	0.00	0.00	0.00	0.00	8.42E-06	1.39E-04	1.14E-04	1.06E-05	-6.83E-02
POCP	kg NMVOC-eq.	2.67E-02	4.82E-04	8.07E-04	3.06E-06	0.00	0.00	0.00	0.00	0.00	5.32E-06	5.07E-05	3.43E-05	6.68E-06	-2.29E-02
ADPF*2	MJ	138.00	1.89	9.11E-02	0.00	0.00	0.00	0.00	0.00	0.00	5.10E-03	0.12	5.35E-02	6.40E-03	-61.30
ADPE*2	kg Sb eq.	9.06E-05	3.67E-07	1.97E-08	0.00	0.00	0.00	0.00	0.00	0.00	5.70E-10	2.36E-08	2.13E-07	7.16E-10	-9.50E-04
WDP*2	m ³ world eq. deprived	3.79	9.03E-03	5.37E-03	0.00	0.00	0.00	0.00	0.00	0.00	5.37E-05	5.88E-04	7.28E-04	6.75E-05	-1.31
Use of resources															
PERE	MJ	19.40	2.49E-02	1.45E-03	0.00	0.00	0.00	0.00	0.00	0.00	1.58E-04	1.61E-03	6.90E-03	1.99E-04	-5.46
PERM	MJ	19.40	2.49E-02	1.45E-03	0.00	0.00	0.00	0.00	0.00	0.00	1.58E-04	1.61E-03	6.90E-03	1.99E-04	-5.46
PERT	MJ	19.40	2.49E-02	1.45E-03	0.00	0.00	0.00	0.00	0.00	0.00	1.58E-04	1.61E-03	6.90E-03	1.99E-04	-5.46
PENRE	MJ	138.00	1.89	9.11E-02	0.00	0.00	0.00	0.00	0.00	0.00	5.10E-03	0.12	5.35E-02	6.40E-03	-61.30
PENRM	MJ	138.00	1.89	9.11E-02	0.00	0.00	0.00	0.00	0.00	0.00	5.10E-03	0.12	5.35E-02	6.40E-03	-61.30
PENRT	MJ	138.00	1.89	9.11E-02	0.00	0.00	0.00	0.00	0.00	0.00	5.10E-03	0.12	5.35E-02	6.40E-03	-61.30
SM	kg	9.25E-02	8.04E-04	5.18E-05	0.00	0.00	0.00	0.00	0.00	0.00	1.67E-06	5.21E-05	5.68E-05	2.10E-06	-5.21E-02
RSF	MJ	3.10E-03	1.02E-05	6.79E-07	0.00	0.00	0.00	0.00	0.00	0.00	2.89E-08	6.63E-07	2.45E-06	3.63E-08	-3.07E-04
NRSF	MJ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FW	m ³	9.23E-02	2.77E-04	6.86E-05	0.00	0.00	0.00	0.00	0.00	0.00	-5.97E-05	1.80E-05	2.04E-05	-7.50E-05	-4.12E-02
Waste categories															
HWD	kg	1.06	3.21E-03	1.09E-03	0.00	0.00	0.00	0.00	0.00	0.00	1.41E-05	2.08E-04	3.52E-04	1.77E-05	-0.49
NHWD	kg	18.60	5.96E-02	0.39	0.00	0.00	0.00	0.00	0.00	0.00	8.12E-02	3.85E-03	1.02E-02	0.10	-27.90
RWD	kg	8.89E-05	4.08E-07	2.13E-08	0.00	0.00	0.00	0.00	0.00	0.00	3.08E-09	2.65E-08	5.19E-08	3.87E-09	-6.64E-05
Output material flows															
CRU	kg	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MFR	kg	1.08E-03	1.41E-05	6.81E-07	0.00	0.00	0.00	0.00	0.00	0.00	9.91E-08	9.15E-07	0.14	1.25E-07	-2.70E-03
MER	kg	1.44E-05	8.69E-08	5.81E-09	0.00	0.00	0.00	0.00	0.00	0.00	3.43E-10	5.44E-09	7.94E-09	4.32E-10	-7.75E-06
EE	MJ	8.02E-02	3.43E-04	2.12E-05	0.00	0.00	0.00	0.00	0.00	0.00	1.76E-06	2.23E-05	3.05E-05	2.21E-06	-2.11E-02

Key:

GWP-t – global warming potential - total **GWP-f** – global warming potential fossil fuels **GWP-b** – global warming potential - biogenic **GWP-l** – global warming potential - land use and land use change **ODP** – ozone depletion potential **AP** - acidification potential **EP-fw** - eutrophication potential - aquatic freshwater **EP-m** - eutrophication potential - aquatic marine **EP-t** - eutrophication potential - terrestrial **POCP** - photochemical ozone formation potential **ADPF*2** - abiotic depletion potential – fossil resources **ADPE*2** - abiotic depletion potential – minerals&metals **WDP*2** – Water (user) deprivation potential **PERE** - Use of renewable primary energy **PERM** - use of renewable primary energy resources **PERT** - total use of renewable primary energy resources **PENRE** - use of non-renewable primary energy **PENRM** - use of non-renewable primary energy resources **PENRT** - total use of non-renewable primary energy resources **SM** - use of secondary material **RSF** - use of renewable secondary fuels **NRSF** - use of non-renewable secondary fuels **FW** - net use of fresh water **HWD** - hazardous waste disposed **NHWD** - non-hazardous waste disposed **RWD** - radioactive waste disposed **CRU** - components for re-use **MFR** - materials for recycling **MER** - materials for energy recovery **EE** - exported energy



Results per 1 pc PG2 - Bathroom and balcony drains

Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D	
Additional environmental impact indicators																
PM	Disease incidence	6.98E-07	1.22E-08	7.17E-08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.64E-11	8.59E-10	7.06E-10	4.57E-11	-2.51E-07
IRP*1	kBq U235 eq.	0.34	1.67E-03	8.60E-05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.26E-05	1.08E-04	2.08E-04	1.58E-05	-0.26
ETP-fw*2	CTUe	99.40	0.46	3.39	2.49E-05	0.00	0.00	0.00	0.00	0.00	0.00	0.16	2.95E-02	4.17E-02	0.20	-94.70
HTP-c*2	CTUh	4.82E-08	6.46E-10	1.08E-09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.64E-12	4.20E-11	3.41E-11	2.07E-12	-1.75E-08
HTP-nc*2	CTUh	1.17E-07	1.24E-09	1.12E-07	6.64E-13	0.00	0.00	0.00	0.00	0.00	0.00	7.52E-11	8.10E-11	1.97E-10	9.45E-11	-7.76E-07
SQP*2	dimensionless	81.30	1.86	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.50E-03	0.12	9.32E-02	1.19E-02	-27.90

Key:

PM – particulate matter emissions potential **IRP*1** – ionizing radiation potential – human health **ETP-fw*2** - Eco-toxicity potential – freshwater **HTP-c*2** - Human toxicity potential – cancer effects **HTP-nc*2** - Human toxicity potential – non-cancer effects **SQP*2** – soil quality potential

Disclaimers

*1 This impact category deals mainly with the eventual impact of low-dose ionising radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionising radiation from the soil, from radon and from some building materials is also not measured by this indicator

*2 The results of this environmental impact indicator shall be used with care as the uncertainties on these results are high or as there is limited experience with the indicator



Results per 1 pc PG3 - Floor and cellar drains

Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Core indicators															
GWP-t	kg CO ₂ eq.	5.85	0.13	1.85	0.00	0.00	0.00	0.00	0.00	0.00	1.15E-02	8.23E-03	5.74E-03	9.92E-02	-3.76
GWP-f	kg CO ₂ eq.	6.48	0.13	2.23E-02	0.00	0.00	0.00	0.00	0.00	0.00	7.88E-04	8.23E-03	5.86E-03	6.77E-03	-3.76
GWP-b	kg CO ₂ eq.	-0.64	5.14E-06	1.83	0.00	0.00	0.00	0.00	0.00	0.00	1.08E-02	2.63E-07	-1.24E-04	9.24E-02	1.20E-03
GWP-l	kg CO ₂ eq.	4.79E-03	5.45E-05	3.04E-06	0.00	0.00	0.00	0.00	0.00	0.00	2.22E-07	3.34E-06	7.09E-06	1.91E-06	-3.71E-03
ODP	kg CFC-11 eq.	1.09E-07	2.09E-09	1.33E-10	0.00	0.00	0.00	0.00	0.00	0.00	5.30E-12	1.28E-10	6.84E-11	4.55E-11	-5.40E-08
AP	mol H ⁺ eq.	3.46E-02	3.32E-04	3.78E-04	0.00	0.00	0.00	0.00	0.00	0.00	2.65E-06	3.43E-05	5.98E-05	2.28E-05	-0.12
EP-fw	kg P eq.	1.84E-03	1.06E-05	1.43E-05	0.00	0.00	0.00	0.00	0.00	0.00	1.18E-06	6.48E-07	2.96E-06	1.02E-05	-9.20E-03
EP-m	kg N eq.	5.52E-03	8.38E-05	8.81E-04	0.00	0.00	0.00	0.00	0.00	0.00	2.22E-05	1.25E-05	1.39E-05	1.91E-04	-6.96E-03
EP-t	mol N eq.	5.79E-02	9.07E-04	1.89E-03	0.00	0.00	0.00	0.00	0.00	0.00	8.26E-06	1.36E-04	1.56E-04	7.09E-05	-9.15E-02
POCP	kg NMVOC-eq.	2.60E-02	5.00E-04	1.02E-03	3.07E-06	0.00	0.00	0.00	0.00	0.00	5.22E-06	4.98E-05	4.64E-05	4.48E-05	-2.90E-02
ADPF*2	MJ	123.00	1.96	0.12	0.00	0.00	0.00	0.00	0.00	0.00	5.00E-03	0.12	7.21E-02	4.29E-02	-61.10
ADPE*2	kg Sb eq.	6.10E-05	3.80E-07	2.49E-08	0.00	0.00	0.00	0.00	0.00	0.00	5.59E-10	2.31E-08	3.15E-07	4.80E-09	-1.42E-03
WDP*2	m ³ world eq. deprived	2.51	9.37E-03	6.77E-03	0.00	0.00	0.00	0.00	0.00	0.00	5.27E-05	5.77E-04	1.02E-03	4.53E-04	-1.53
Use of resources															
PERE	MJ	23.00	2.58E-02	1.84E-03	0.00	0.00	0.00	0.00	0.00	0.00	1.55E-04	1.58E-03	1.00E-02	1.33E-03	-6.57
PERM	MJ	23.00	2.58E-02	1.84E-03	0.00	0.00	0.00	0.00	0.00	0.00	1.55E-04	1.58E-03	1.00E-02	1.33E-03	-6.57
PERT	MJ	23.00	2.58E-02	1.84E-03	0.00	0.00	0.00	0.00	0.00	0.00	1.55E-04	1.58E-03	1.00E-02	1.33E-03	-6.57
PENRE	MJ	123.00	1.96	0.12	0.00	0.00	0.00	0.00	0.00	0.00	5.00E-03	0.12	7.21E-02	4.29E-02	-61.10
PENRM	MJ	123.00	1.96	0.12	0.00	0.00	0.00	0.00	0.00	0.00	5.00E-03	0.12	7.21E-02	4.29E-02	-61.10
PENRT	MJ	123.00	1.96	0.12	0.00	0.00	0.00	0.00	0.00	0.00	5.00E-03	0.12	7.21E-02	4.29E-02	-61.10
SM	kg	0.13	8.33E-04	6.55E-05	0.00	0.00	0.00	0.00	0.00	0.00	1.64E-06	5.11E-05	7.82E-05	1.41E-05	-7.40E-02
RSF	MJ	2.47E-03	1.06E-05	8.56E-07	0.00	0.00	0.00	0.00	0.00	0.00	2.84E-08	6.50E-07	3.36E-06	2.44E-07	-4.31E-04
NRSF	MJ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FW	m ³	6.31E-02	2.87E-04	8.64E-05	0.00	0.00	0.00	0.00	0.00	0.00	-5.86E-05	1.77E-05	2.88E-05	-5.03E-04	-5.11E-02
Waste categories															
HWD	kg	1.39	3.33E-03	1.37E-03	0.00	0.00	0.00	0.00	0.00	0.00	1.38E-05	2.04E-04	4.95E-04	1.18E-04	-0.64
NHWD	kg	19.30	6.18E-02	0.50	0.00	0.00	0.00	0.00	0.00	0.00	7.96E-02	3.78E-03	1.43E-02	0.68	-38.10
RWD	kg	8.71E-05	4.22E-07	2.69E-08	0.00	0.00	0.00	0.00	0.00	0.00	3.02E-09	2.60E-08	7.37E-08	2.60E-08	-7.37E-05
Output material flows															
CRU	kg	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MFR	kg	1.17E-03	1.46E-05	8.61E-07	0.00	0.00	0.00	0.00	0.00	0.00	9.72E-08	8.97E-07	0.20	8.35E-07	-3.66E-03
MER	kg	2.19E-05	9.01E-08	7.34E-09	0.00	0.00	0.00	0.00	0.00	0.00	3.37E-10	5.33E-09	1.11E-08	2.89E-09	-1.02E-05
EE	MJ	7.88E-02	3.55E-04	2.68E-05	0.00	0.00	0.00	0.00	0.00	0.00	1.72E-06	2.19E-05	4.24E-05	1.48E-05	-2.67E-02

Key:

GWP-t – global warming potential - total **GWP-f** – global warming potential fossil fuels **GWP-b** – global warming potential - biogenic **GWP-l** – global warming potential - land use and land use change **ODP** – ozone depletion potential **AP** - acidification potential **EP-fw** - eutrophication potential - aquatic freshwater **EP-m** - eutrophication potential - aquatic marine **EP-t** - eutrophication potential - terrestrial **POCP** - photochemical ozone formation potential **ADPF*2** - abiotic depletion potential – fossil resources **ADPE*2** - abiotic depletion potential – minerals&metals **WDP*2** – Water (user) deprivation potential **PERE** - Use of renewable primary energy **PERM** - use of renewable primary energy resources **PERT** - total use of renewable primary energy resources **PENRE** - use of non-renewable primary energy **PENRM** - use of non-renewable primary energy resources **PENRT** - total use of non-renewable primary energy resources **SM** - use of secondary material **RSF** - use of renewable secondary fuels **NRSF** - use of non-renewable secondary fuels **FW** - net use of fresh water **HWD** - hazardous waste disposed **NHWD** - non-hazardous waste disposed **RWD** - radioactive waste disposed **CRU** - components for re-use **MFR** - materials for recycling **MER** - materials for energy recovery **EE** - exported energy



Results per 1 pc PG3 - Floor and cellar drains

Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Additional environmental impact indicators															
PM	Disease incidence	6.72E-07	1.26E-08	9.03E-08	0.00	0.00	0.00	0.00	0.00	0.00	3.57E-11	8.42E-10	8.50E-10	3.07E-10	-3.24E-07
IRP*1	kBq U235 eq.	0.34	1.73E-03	1.09E-04	0.00	0.00	0.00	0.00	0.00	0.00	1.24E-05	1.06E-04	2.96E-04	1.06E-04	-0.29
ETP-fw*2	CTUe	103.00	0.47	4.29	2.51E-05	0.00	0.00	0.00	0.00	0.00	0.16	2.89E-02	5.14E-02	1.33	-135.00
HTP-c*2	CTUh	6.65E-08	6.69E-10	1.36E-09	0.00	0.00	0.00	0.00	0.00	0.00	1.61E-12	4.12E-11	4.49E-11	1.39E-11	-2.31E-08
HTP-nc*2	CTUh	9.51E-08	1.28E-09	1.43E-07	6.68E-13	0.00	0.00	0.00	0.00	0.00	7.38E-11	7.94E-11	2.79E-10	6.34E-10	-1.16E-06
SQP*2	dimensionless	102.00	1.93	0.32	0.00	0.00	0.00	0.00	0.00	0.00	9.32E-03	0.12	0.13	8.00E-02	-39.10

Key:

PM – particulate matter emissions potential **IRP*1** – ionizing radiation potential – human health **ETP-fw*2** - Eco-toxicity potential – freshwater **HTP-c*2** - Human toxicity potential – cancer effects **HTP-nc*2** - Human toxicity potential – non-cancer effects **SQP*2** – soil quality potential

Disclaimers

*1 This impact category deals mainly with the eventual impact of low-dose ionising radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionising radiation from the soil, from radon and from some building materials is also not measured by this indicator

*2 The results of this environmental impact indicator shall be used with care as the uncertainties on these results are high or as there is limited experience with the indicator



Results per 1 pc PG4 - Shower channels

Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Core indicators															
GWP-t	kg CO ₂ eq.	20.00	0.37	8.46	0.00	0.00	0.00	0.00	0.00	0.00	2.54E-02	1.81E-02	1.71E-02	3.45E-02	-6.76
GWP-f	kg CO ₂ eq.	23.00	0.37	0.13	0.00	0.00	0.00	0.00	0.00	0.00	1.73E-03	1.81E-02	1.74E-02	2.36E-03	-6.75
GWP-b	kg CO ₂ eq.	-3.09	1.43E-05	8.33	0.00	0.00	0.00	0.00	0.00	0.00	2.37E-02	5.80E-07	-3.67E-04	3.22E-02	-4.84E-04
GWP-l	kg CO ₂ eq.	2.28E-02	1.52E-04	1.42E-05	0.00	0.00	0.00	0.00	0.00	0.00	4.89E-07	7.36E-06	2.10E-05	6.64E-07	-5.03E-03
ODP	kg CFC-11 eq.	3.74E-06	5.84E-09	6.21E-10	0.00	0.00	0.00	0.00	0.00	0.00	1.17E-11	2.83E-10	2.03E-10	1.58E-11	-1.10E-07
AP	mol H ⁺ eq.	0.10	9.25E-04	1.76E-03	0.00	0.00	0.00	0.00	0.00	0.00	5.84E-06	7.55E-05	1.78E-04	7.94E-06	-5.07E-02
EP-fw	kg P eq.	5.88E-03	2.95E-05	6.51E-05	0.00	0.00	0.00	0.00	0.00	0.00	2.60E-06	1.43E-06	8.78E-06	3.54E-06	-3.90E-03
EP-m	kg N eq.	2.90E-02	2.34E-04	4.10E-03	0.00	0.00	0.00	0.00	0.00	0.00	4.89E-05	2.75E-05	4.12E-05	6.65E-05	-5.77E-03
EP-t	mol N eq.	0.19	2.53E-03	8.80E-03	0.00	0.00	0.00	0.00	0.00	0.00	1.82E-05	2.99E-04	4.62E-04	2.47E-05	-6.46E-02
POCP	kg NMVOC-eq.	7.45E-02	1.39E-03	4.72E-03	3.06E-06	0.00	0.00	0.00	0.00	0.00	1.15E-05	1.10E-04	1.38E-04	1.56E-05	-2.61E-02
ADPF*2	MJ	382.00	5.47	0.54	0.00	0.00	0.00	0.00	0.00	0.00	1.10E-02	0.27	0.21	1.50E-02	-119.00
ADPE*2	kg Sb eq.	1.24E-04	1.06E-06	1.16E-07	0.00	0.00	0.00	0.00	0.00	0.00	1.23E-09	5.09E-08	9.36E-07	1.67E-09	-4.02E-04
WDP*2	m ³ world eq. deprived	18.90	2.61E-02	3.18E-02	0.00	0.00	0.00	0.00	0.00	0.00	1.16E-04	1.27E-03	3.03E-03	1.58E-04	-1.41
Use of resources															
PERE	MJ	91.60	7.18E-02	8.57E-03	0.00	0.00	0.00	0.00	0.00	0.00	3.41E-04	3.47E-03	2.97E-02	4.64E-04	-6.50
PERM	MJ	91.60	7.18E-02	8.57E-03	0.00	0.00	0.00	0.00	0.00	0.00	3.41E-04	3.47E-03	2.97E-02	4.64E-04	-6.50
PERT	MJ	91.60	7.18E-02	8.57E-03	0.00	0.00	0.00	0.00	0.00	0.00	3.41E-04	3.47E-03	2.97E-02	4.64E-04	-6.50
PENRE	MJ	382.00	5.47	0.54	0.00	0.00	0.00	0.00	0.00	0.00	1.10E-02	0.27	0.21	1.50E-02	-119.00
PENRM	MJ	382.00	5.47	0.54	0.00	0.00	0.00	0.00	0.00	0.00	1.10E-02	0.27	0.21	1.50E-02	-119.00
PENRT	MJ	382.00	5.47	0.54	0.00	0.00	0.00	0.00	0.00	0.00	1.10E-02	0.27	0.21	1.50E-02	-119.00
SM	kg	0.28	2.32E-03	3.05E-04	0.00	0.00	0.00	0.00	0.00	0.00	3.61E-06	1.12E-04	2.32E-04	4.91E-06	-3.38E-02
RSF	MJ	3.33E-02	2.95E-05	4.01E-06	0.00	0.00	0.00	0.00	0.00	0.00	6.24E-08	1.43E-06	9.99E-06	8.48E-08	-2.04E-04
NRSF	MJ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FW	m ³	0.45	8.00E-04	4.08E-04	0.00	0.00	0.00	0.00	0.00	0.00	-1.29E-04	3.90E-05	8.55E-05	-1.75E-04	-4.07E-02
Waste categories															
HWD	kg	1.55	9.27E-03	6.45E-03	0.00	0.00	0.00	0.00	0.00	0.00	3.04E-05	4.49E-04	1.47E-03	4.13E-05	-0.49
NHWD	kg	38.00	0.17	2.30	0.00	0.00	0.00	0.00	0.00	0.00	0.18	8.32E-03	4.24E-02	0.24	-22.10
RWD	kg	3.38E-04	1.18E-06	1.25E-07	0.00	0.00	0.00	0.00	0.00	0.00	6.66E-09	5.72E-08	2.19E-07	9.05E-09	-1.14E-04
Output material flows															
CRU	kg	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MFR	kg	3.85E-03	4.08E-05	4.01E-06	0.00	0.00	0.00	0.00	0.00	0.00	2.14E-07	1.97E-06	0.58	2.91E-07	-2.35E-03
MER	kg	2.50E-05	2.51E-07	3.42E-08	0.00	0.00	0.00	0.00	0.00	0.00	7.42E-10	1.17E-08	3.29E-08	1.01E-09	-7.09E-06
EE	MJ	0.32	9.90E-04	1.25E-04	0.00	0.00	0.00	0.00	0.00	0.00	3.79E-06	4.82E-05	1.26E-04	5.16E-06	-2.11E-02

Key:

GWP-t – global warming potential - total **GWP-f** – global warming potential fossil fuels **GWP-b** – global warming potential - biogenic **GWP-l** – global warming potential - land use and land use change **ODP** – ozone depletion potential **AP** - acidification potential **EP-fw** - eutrophication potential - aquatic freshwater **EP-m** - eutrophication potential - aquatic marine **EP-t** - eutrophication potential - terrestrial **POCP** - photochemical ozone formation potential **ADPF*2** - abiotic depletion potential – fossil resources **ADPE*2** - abiotic depletion potential – minerals&metals **WDP*2** – Water (user) deprivation potential **PERE** - Use of renewable primary energy **PERM** - use of renewable primary energy resources **PERT** - total use of renewable primary energy resources **PENRE** - use of non-renewable primary energy **PENRM** - use of non-renewable primary energy resources **PENRT** - total use of non-renewable primary energy resources **SM** - use of secondary material **RSF** - use of renewable secondary fuels **NRSF** - use of non-renewable secondary fuels **FW** - net use of fresh water **HWD** - hazardous waste disposed **NHWD** - non-hazardous waste disposed **RWD** - radioactive waste disposed **CRU** - components for re-use **MFR** - materials for recycling **MER** - materials for energy recovery **EE** - exported energy



Results per 1 pc PG4 - Shower channels

Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Additional environmental impact indicators															
PM	Disease incidence	1.28E-06	3.52E-08	4.26E-07	0.00	0.00	0.00	0.00	0.00	0.00	7.86E-11	1.85E-09	2.52E-09	1.07E-10	-2.66E-07
IRP*1	kBq U235 eq.	1.32	4.81E-03	5.06E-04	0.00	0.00	0.00	0.00	0.00	0.00	2.72E-05	2.34E-04	8.78E-04	3.70E-05	-0.46
ETP-fw*2	CTUe	242.00	1.32	19.80	2.50E-05	0.00	0.00	0.00	0.00	0.00	0.34	6.37E-02	0.15	0.47	-58.00
HTP-c*2	CTUh	1.93E-07	1.87E-09	6.31E-09	0.00	0.00	0.00	0.00	0.00	0.00	3.55E-12	9.06E-11	1.33E-10	4.83E-12	-1.64E-08
HTP-nc*2	CTUh	1.39E-07	3.58E-09	6.54E-07	6.65E-13	0.00	0.00	0.00	0.00	0.00	1.62E-10	1.75E-10	8.29E-10	2.21E-10	-3.44E-07
SQP*2	dimensionless	441.00	5.38	1.48	0.00	0.00	0.00	0.00	0.00	0.00	2.05E-02	0.27	0.37	2.79E-02	-20.20

Key:

PM – particulate matter emissions potential **IRP*1** – ionizing radiation potential – human health **ETP-fw*2** - Eco-toxicity potential – freshwater **HTP-c*2** - Human toxicity potential – cancer effects **HTP-nc*2** - Human toxicity potential – non-cancer effects **SQP*2** – soil quality potential

Disclaimers

*1 This impact category deals mainly with the eventual impact of low-dose ionising radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionising radiation from the soil, from radon and from some building materials is also not measured by this indicator

*2 The results of this environmental impact indicator shall be used with care as the uncertainties on these results are high or as there is limited experience with the indicator



Results per 1 pc PG5 - Grates for shower channels

Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Core indicators															
GWP-t	kg CO ₂ eq.	13.00	0.22	3.91	0.00	0.00	0.00	0.00	0.00	0.00	1.75E-02	1.25E-02	6.66E-02	6.91E-02	-12.90
GWP-f	kg CO ₂ eq.	14.30	0.22	2.87E-02	0.00	0.00	0.00	0.00	0.00	0.00	1.20E-03	1.25E-02	6.80E-02	4.72E-03	-12.70
GWP-b	kg CO ₂ eq.	-1.24	8.48E-06	3.88	0.00	0.00	0.00	0.00	0.00	0.00	1.63E-02	4.00E-07	-1.43E-03	6.44E-02	-0.10
GWP-l	kg CO ₂ eq.	1.56E-02	8.99E-05	6.25E-06	0.00	0.00	0.00	0.00	0.00	0.00	3.37E-07	5.08E-06	8.22E-05	1.33E-06	-9.88E-03
ODP	kg CFC-11 eq.	1.35E-07	3.45E-09	2.74E-10	0.00	0.00	0.00	0.00	0.00	0.00	8.05E-12	1.95E-10	7.93E-10	3.17E-11	-9.41E-08
AP	mol H ⁺ eq.	7.49E-02	5.47E-04	7.78E-04	0.00	0.00	0.00	0.00	0.00	0.00	4.03E-06	5.21E-05	6.94E-04	1.59E-05	-6.78E-02
EP-fw	kg P eq.	6.47E-03	1.75E-05	3.02E-05	0.00	0.00	0.00	0.00	0.00	0.00	1.80E-06	9.84E-07	3.43E-05	7.08E-06	-4.08E-03
EP-m	kg N eq.	1.47E-02	1.38E-04	1.81E-03	0.00	0.00	0.00	0.00	0.00	0.00	3.38E-05	1.90E-05	1.61E-04	1.33E-04	-1.24E-02
EP-t	mol N eq.	0.15	1.50E-03	3.87E-03	0.00	0.00	0.00	0.00	0.00	0.00	1.25E-05	2.07E-04	1.80E-03	4.94E-05	-0.13
POCP	kg NMVOC-eq.	4.93E-02	8.24E-04	2.13E-03	3.07E-06	0.00	0.00	0.00	0.00	0.00	7.93E-06	7.56E-05	5.38E-04	3.12E-05	-4.24E-02
ADPF^{*2}	MJ	175.00	3.24	0.24	0.00	0.00	0.00	0.00	0.00	0.00	7.60E-03	0.18	0.84	2.99E-02	-144.00
ADPE^{*2}	kg Sb eq.	3.01E-04	6.27E-07	5.12E-08	0.00	0.00	0.00	0.00	0.00	0.00	8.50E-10	3.51E-08	3.66E-06	3.35E-09	-2.85E-04
WDP^{*2}	m ³ world eq. deprived	4.53	1.54E-02	1.37E-02	0.00	0.00	0.00	0.00	0.00	0.00	8.01E-05	8.76E-04	1.18E-02	3.16E-04	-3.75
Use of resources															
PERE	MJ	69.90	4.25E-02	3.76E-03	0.00	0.00	0.00	0.00	0.00	0.00	2.36E-04	2.40E-03	0.12	9.28E-04	-30.90
PERM	MJ	69.90	4.25E-02	3.76E-03	0.00	0.00	0.00	0.00	0.00	0.00	2.36E-04	2.40E-03	0.12	9.28E-04	-30.90
PERT	MJ	69.90	4.25E-02	3.76E-03	0.00	0.00	0.00	0.00	0.00	0.00	2.36E-04	2.40E-03	0.12	9.28E-04	-30.90
PENRE	MJ	175.00	3.24	0.24	0.00	0.00	0.00	0.00	0.00	0.00	7.60E-03	0.18	0.84	2.99E-02	-144.00
PENRM	MJ	175.00	3.24	0.24	0.00	0.00	0.00	0.00	0.00	0.00	7.60E-03	0.18	0.84	2.99E-02	-144.00
PENRT	MJ	175.00	3.24	0.24	0.00	0.00	0.00	0.00	0.00	0.00	7.60E-03	0.18	0.84	2.99E-02	-144.00
SM	kg	1.36	1.37E-03	1.35E-04	0.00	0.00	0.00	0.00	0.00	0.00	2.49E-06	7.76E-05	9.06E-04	9.82E-06	-1.31
RSF	MJ	3.83E-03	1.74E-05	1.74E-06	0.00	0.00	0.00	0.00	0.00	0.00	4.31E-08	9.88E-07	3.90E-05	1.70E-07	-3.23E-03
NRSF	MJ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FW	m ³	0.14	4.73E-04	1.74E-04	0.00	0.00	0.00	0.00	0.00	0.00	-8.90E-05	2.69E-05	3.34E-04	-3.51E-04	-0.12
Waste categories															
HWD	kg	12.10	5.49E-03	2.76E-03	0.00	0.00	0.00	0.00	0.00	0.00	2.10E-05	3.10E-04	5.74E-03	8.26E-05	-11.50
NHWD	kg	34.50	0.10	1.02	0.00	0.00	0.00	0.00	0.00	0.00	0.12	5.75E-03	0.17	0.48	-25.70
RWD	kg	2.89E-04	6.97E-07	5.52E-08	0.00	0.00	0.00	0.00	0.00	0.00	4.59E-09	3.95E-08	8.55E-07	1.81E-08	-2.06E-04
Output material flows															
CRU	kg	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MFR	kg	3.92E-03	2.41E-05	1.77E-06	0.00	0.00	0.00	0.00	0.00	0.00	1.48E-07	1.36E-06	2.27	5.82E-07	-3.30E-03
MER	kg	1.75E-04	1.49E-07	1.51E-08	0.00	0.00	0.00	0.00	0.00	0.00	5.12E-10	8.11E-09	1.28E-07	2.02E-09	-1.65E-04
EE	MJ	0.30	5.86E-04	5.50E-05	0.00	0.00	0.00	0.00	0.00	0.00	2.62E-06	3.33E-05	4.92E-04	1.03E-05	-0.26

Key:

GWP-t – global warming potential - total **GWP-f** – global warming potential fossil fuels **GWP-b** – global warming potential - biogenic **GWP-l** – global warming potential - land use and land use change **ODP** – ozone depletion potential **AP** - acidification potential **EP-fw** - eutrophication potential - aquatic freshwater **EP-m** - eutrophication potential - aquatic marine **EP-t** - eutrophication potential - terrestrial **POCP** - photochemical ozone formation potential **ADPF^{*2}** - abiotic depletion potential – fossil resources **ADPE^{*2}** - abiotic depletion potential – minerals&metals **WDP^{*2}** – Water (user) deprivation potential **PERE** - Use of renewable primary energy **PERM** - use of renewable primary energy resources **PERT** - total use of renewable primary energy resources **PENRE** - use of non-renewable primary energy **PENRM** - use of non-renewable primary energy resources **PENRT** - total use of non-renewable primary energy resources **SM** - use of secondary material **RSF** - use of renewable secondary fuels **NRSF** - use of non-renewable secondary fuels **FW** - net use of fresh water **HWD** - hazardous waste disposed **NHWD** - non-hazardous waste disposed **RWD** - radioactive waste disposed **CRU** - components for re-use **MFR** - materials for recycling **MER** - materials for energy recovery **EE** - exported energy



Results per 1 pc PG5 - Grates for shower channels

Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Additional environmental impact indicators															
PM	Disease incidence	1.07E-06	2.08E-08	1.82E-07	0.00	0.00	0.00	0.00	0.00	0.00	5.42E-11	1.28E-09	9.86E-09	2.14E-10	-1.00E-06
IRP*1	kBq U235 eq.	1.12	2.85E-03	2.23E-04	0.00	0.00	0.00	0.00	0.00	0.00	1.88E-05	1.61E-04	3.43E-03	7.41E-05	-0.83
ETP-fw*2	CTUe	137.00	0.78	8.94	2.50E-05	0.00	0.00	0.00	0.00	0.00	0.24	4.40E-02	0.60	0.93	-124.00
HTP-c*2	CTUh	3.34E-07	1.10E-09	2.82E-09	0.00	0.00	0.00	0.00	0.00	0.00	2.45E-12	6.25E-11	5.21E-10	9.66E-12	-3.16E-07
HTP-nc*2	CTUh	2.68E-07	2.12E-09	3.04E-07	6.67E-13	0.00	0.00	0.00	0.00	0.00	1.12E-10	1.21E-10	3.24E-09	4.42E-10	-2.47E-07
SQP*2	dimensionless	252.00	3.19	0.66	0.00	0.00	0.00	0.00	0.00	0.00	1.42E-02	0.18	1.45	5.58E-02	-60.20

Key:

PM – particulate matter emissions potential **IRP*1** – ionizing radiation potential – human health **ETP-fw*2** - Eco-toxicity potential – freshwater **HTP-c*2** - Human toxicity potential – cancer effects **HTP-nc*2** - Human toxicity potential – non-cancer effects **SQP*2** – soil quality potential

Disclaimers

*1 This impact category deals mainly with the eventual impact of low-dose ionising radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionising radiation from the soil, from radon and from some building materials is also not measured by this indicator

*2 The results of this environmental impact indicator shall be used with care as the uncertainties on these results are high or as there is limited experience with the indicator



Results per 1 pc PG6 - Accessories

Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Core indicators															
GWP-t	kg CO ₂ eq.	8.14	0.13	1.34	0.00	0.00	0.00	0.00	0.00	0.00	1.18E-02	8.45E-03	1.62E-02	2.14E-02	-3.51
GWP-f	kg CO ₂ eq.	8.51	0.13	2.18E-02	0.00	0.00	0.00	0.00	0.00	0.00	8.08E-04	8.44E-03	1.61E-02	1.46E-03	-3.51
GWP-b	kg CO ₂ eq.	-0.39	4.92E-06	1.32	0.00	0.00	0.00	0.00	0.00	0.00	1.10E-02	2.70E-07	2.22E-06	2.00E-02	1.22E-03
GWP-l	kg CO ₂ eq.	8.45E-03	5.22E-05	2.26E-06	0.00	0.00	0.00	0.00	0.00	0.00	2.28E-07	3.43E-06	2.00E-05	4.12E-07	-3.70E-03
ODP	kg CFC-11 eq.	2.83E-06	2.01E-09	9.93E-11	0.00	0.00	0.00	0.00	0.00	0.00	5.43E-12	1.32E-10	1.89E-10	9.83E-12	-4.87E-08
AP	mol H ⁺ eq.	3.66E-02	3.18E-04	2.81E-04	0.00	0.00	0.00	0.00	0.00	0.00	2.72E-06	3.52E-05	1.63E-04	4.92E-06	-0.13
EP-fw	kg P eq.	4.30E-03	1.01E-05	1.03E-05	0.00	0.00	0.00	0.00	0.00	0.00	1.21E-06	6.64E-07	8.00E-06	2.19E-06	-9.95E-03
EP-m	kg N eq.	7.09E-03	8.03E-05	6.55E-04	0.00	0.00	0.00	0.00	0.00	0.00	2.28E-05	1.28E-05	3.83E-05	4.12E-05	-7.23E-03
EP-t	mol N eq.	6.96E-02	8.69E-04	1.41E-03	0.00	0.00	0.00	0.00	0.00	0.00	8.47E-06	1.40E-04	4.27E-04	1.53E-05	-9.62E-02
POCP	kg NMVOC-eq.	2.98E-02	4.79E-04	7.53E-04	3.06E-06	0.00	0.00	0.00	0.00	0.00	5.35E-06	5.11E-05	1.28E-04	9.68E-06	-2.98E-02
ADPF*2	MJ	164.00	1.88	8.57E-02	0.00	0.00	0.00	0.00	0.00	0.00	5.13E-03	0.12	0.20	9.27E-03	-55.80
ADPE*2	kg Sb eq.	1.33E-04	3.64E-07	1.86E-08	0.00	0.00	0.00	0.00	0.00	0.00	5.74E-10	2.37E-08	8.47E-07	1.04E-09	-1.56E-03
WDP*2	m ³ world eq. deprived	3.16	8.97E-03	5.10E-03	0.00	0.00	0.00	0.00	0.00	0.00	5.41E-05	5.92E-04	2.78E-03	9.78E-05	-1.66
Use of resources															
PERE	MJ	20.80	2.47E-02	1.37E-03	0.00	0.00	0.00	0.00	0.00	0.00	1.59E-04	1.62E-03	2.70E-02	2.88E-04	-6.97
PERM	MJ	20.80	2.47E-02	1.37E-03	0.00	0.00	0.00	0.00	0.00	0.00	1.59E-04	1.62E-03	2.70E-02	2.88E-04	-6.97
PERT	MJ	20.80	2.47E-02	1.37E-03	0.00	0.00	0.00	0.00	0.00	0.00	1.59E-04	1.62E-03	2.70E-02	2.88E-04	-6.97
PENRE	MJ	164.00	1.88	8.57E-02	0.00	0.00	0.00	0.00	0.00	0.00	5.13E-03	0.12	0.20	9.27E-03	-55.80
PENRM	MJ	164.00	1.88	8.57E-02	0.00	0.00	0.00	0.00	0.00	0.00	5.13E-03	0.12	0.20	9.27E-03	-55.80
PENRT	MJ	164.00	1.88	8.57E-02	0.00	0.00	0.00	0.00	0.00	0.00	5.13E-03	0.12	0.20	9.27E-03	-55.80
SM	kg	0.28	7.98E-04	4.87E-05	0.00	0.00	0.00	0.00	0.00	0.00	1.68E-06	5.24E-05	2.14E-04	3.04E-06	-7.97E-02
RSF	MJ	7.68E-03	1.01E-05	6.43E-07	0.00	0.00	0.00	0.00	0.00	0.00	2.91E-08	6.67E-07	9.21E-06	5.26E-08	-4.64E-04
NRSF	MJ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FW	m ³	8.27E-02	2.75E-04	6.54E-05	0.00	0.00	0.00	0.00	0.00	0.00	-6.01E-05	1.82E-05	7.83E-05	-1.09E-04	-5.51E-02
Waste categories															
HWD	kg	1.78	3.19E-03	1.03E-03	0.00	0.00	0.00	0.00	0.00	0.00	1.41E-05	2.09E-04	1.35E-03	2.56E-05	-0.67
NHWD	kg	34.00	5.92E-02	0.37	0.00	0.00	0.00	0.00	0.00	0.00	8.17E-02	3.88E-03	3.89E-02	0.15	-40.60
RWD	kg	2.40E-04	4.05E-07	2.00E-08	0.00	0.00	0.00	0.00	0.00	0.00	3.10E-09	2.66E-08	2.00E-07	5.61E-09	-7.23E-05
Output material flows															
CRU	kg	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MFR	kg	3.46E-03	1.40E-05	6.41E-07	0.00	0.00	0.00	0.00	0.00	0.00	9.97E-08	9.20E-07	0.53	1.80E-07	-3.89E-03
MER	kg	2.59E-05	8.63E-08	5.47E-09	0.00	0.00	0.00	0.00	0.00	0.00	3.46E-10	5.47E-09	3.02E-08	6.25E-10	-1.07E-05
EE	MJ	0.20	3.40E-04	2.00E-05	0.00	0.00	0.00	0.00	0.00	0.00	1.77E-06	2.25E-05	1.16E-04	3.20E-06	-2.78E-02

Key:

GWP-t – global warming potential - total **GWP-f** – global warming potential fossil fuels **GWP-b** – global warming potential - biogenic **GWP-l** – global warming potential - land use and land use change **ODP** – ozone depletion potential **AP** - acidification potential **EP-fw** - eutrophication potential - aquatic freshwater **EP-m** - eutrophication potential - aquatic marine **EP-t** - eutrophication potential - terrestrial **POCP** - photochemical ozone formation potential **ADPF*2** - abiotic depletion potential – fossil resources **ADPE*2** - abiotic depletion potential – minerals&metals **WDP*2** – Water (user) deprivation potential **PERE** - Use of renewable primary energy **PERM** - use of renewable primary energy resources **PERT** - total use of renewable primary energy resources **PENRE** - use of non-renewable primary energy **PENRM** - use of non-renewable primary energy resources **PENRT** - total use of non-renewable primary energy resources **SM** - use of secondary material **RSF** - use of renewable secondary fuels **NRSF** - use of non-renewable secondary fuels **FW** - net use of fresh water **HWD** - hazardous waste disposed **NHWD** - non-hazardous waste disposed **RWD** - radioactive waste disposed **CRU** - components for re-use **MFR** - materials for recycling **MER** - materials for energy recovery **EE** - exported energy



Results per 1 pc PG6 - Accessories

Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D	
Additional environmental impact indicators																
PM	Disease incidence	4.14E-07	1.21E-08	6.84E-08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.66E-11	8.64E-10	2.41E-09	6.62E-11	-3.37E-07
IRP*1	kBq U235 eq.	0.88	1.65E-03	8.10E-05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.27E-05	1.09E-04	8.02E-04	2.29E-05	-0.28
ETP-fw*2	CTUe	199.00	0.45	3.16	2.50E-05	0.00	0.00	0.00	0.00	0.00	0.00	0.16	2.97E-02	0.15	0.29	-146.00
HTP-c*2	CTUh	1.33E-07	6.41E-10	1.01E-09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.65E-12	4.22E-11	1.24E-10	2.99E-12	-2.43E-08
HTP-nc*2	CTUh	1.31E-07	1.23E-09	1.04E-07	6.65E-13	0.00	0.00	0.00	0.00	0.00	0.00	7.57E-11	8.15E-11	7.58E-10	1.37E-10	-1.27E-06
SQP*2	dimensionless	59.70	1.85	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.56E-03	0.12	0.35	1.73E-02	-41.80

Key:

PM – particulate matter emissions potential **IRP*1** – ionizing radiation potential – human health **ETP-fw*2** - Eco-toxicity potential – freshwater **HTP-c*2** - Human toxicity potential – cancer effects **HTP-nc*2** - Human toxicity potential – non-cancer effects **SQP*2** – soil quality potential

Disclaimers

*1 This impact category deals mainly with the eventual impact of low-dose ionising radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionising radiation from the soil, from radon and from some building materials is also not measured by this indicator

*2 The results of this environmental impact indicator shall be used with care as the uncertainties on these results are high or as there is limited experience with the indicator



Results per 1 pc PG7 - Drains for bathtubs and shower trays

Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Core indicators															
GWP-t	kg CO ₂ eq.	66.10	1.78	2.62	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.14	4.58E-02	0.21	-47.10
GWP-f	kg CO ₂ eq.	66.80	1.78	2.51E-02	0.00	0.00	0.00	0.00	0.00	0.00	1.38E-02	0.14	2.75E-02	1.45E-02	-47.00
GWP-b	kg CO ₂ eq.	-0.70	7.00E-05	2.59	0.00	0.00	0.00	0.00	0.00	0.00	0.19	4.60E-06	1.83E-02	0.20	-1.05E-02
GWP-l	kg CO ₂ eq.	3.93E-02	7.43E-04	4.24E-06	0.00	0.00	0.00	0.00	0.00	0.00	3.88E-06	5.84E-05	5.95E-05	4.09E-06	-3.43E-02
ODP	kg CFC-11 eq.	4.14E-06	2.85E-08	1.86E-10	0.00	0.00	0.00	0.00	0.00	0.00	9.25E-11	2.24E-09	3.29E-10	9.76E-11	-8.53E-07
AP	mol H ⁺ eq.	0.33	4.52E-03	5.27E-04	0.00	0.00	0.00	0.00	0.00	0.00	4.64E-05	5.99E-04	1.88E-04	4.89E-05	-0.33
EP-fw	kg P eq.	2.33E-02	1.44E-04	2.02E-05	0.00	0.00	0.00	0.00	0.00	0.00	2.06E-05	1.13E-05	6.30E-06	2.18E-05	-2.52E-02
EP-m	kg N eq.	4.74E-02	1.14E-03	1.23E-03	0.00	0.00	0.00	0.00	0.00	0.00	3.88E-04	2.18E-04	7.15E-05	4.09E-04	-3.98E-02
EP-t	mol N eq.	0.51	1.24E-02	2.63E-03	0.00	0.00	0.00	0.00	0.00	0.00	1.44E-04	2.38E-03	6.47E-04	1.52E-04	-0.44
POCP	kg NMVOC-eq.	0.38	6.81E-03	1.43E-03	3.07E-06	0.00	0.00	0.00	0.00	0.00	9.11E-05	8.69E-04	2.06E-04	9.61E-05	-0.19
ADPF*2	MJ	2,060.00	26.70	0.16	0.00	0.00	0.00	0.00	0.00	0.00	8.73E-02	2.10	0.33	9.21E-02	-890.00
ADPE*2	kg Sb eq.	2.50E-03	5.18E-06	3.47E-08	0.00	0.00	0.00	0.00	0.00	0.00	9.77E-09	4.04E-07	2.98E-07	1.03E-08	-2.72E-03
WDP*2	m ³ world eq. deprived	16.70	0.13	9.35E-03	0.00	0.00	0.00	0.00	0.00	0.00	9.21E-04	1.01E-02	3.04E-03	9.71E-04	-10.80
Use of resources															
PERE	MJ	81.40	0.35	2.56E-03	0.00	0.00	0.00	0.00	0.00	0.00	2.71E-03	2.76E-02	1.67E-02	2.86E-03	-43.20
PERM	MJ	81.40	0.35	2.56E-03	0.00	0.00	0.00	0.00	0.00	0.00	2.71E-03	2.76E-02	1.67E-02	2.86E-03	-43.20
PERT	MJ	81.40	0.35	2.56E-03	0.00	0.00	0.00	0.00	0.00	0.00	2.71E-03	2.76E-02	1.67E-02	2.86E-03	-43.20
PENRE	MJ	2,060.00	26.70	0.16	0.00	0.00	0.00	0.00	0.00	0.00	8.73E-02	2.10	0.33	9.21E-02	-890.00
PENRM	MJ	2,060.00	26.70	0.16	0.00	0.00	0.00	0.00	0.00	0.00	8.73E-02	2.10	0.33	9.21E-02	-890.00
PENRT	MJ	2,060.00	26.70	0.16	0.00	0.00	0.00	0.00	0.00	0.00	8.73E-02	2.10	0.33	9.21E-02	-890.00
SM	kg	0.48	1.14E-02	9.14E-05	0.00	0.00	0.00	0.00	0.00	0.00	2.87E-05	8.92E-04	2.89E-04	3.02E-05	-0.24
RSF	MJ	5.69E-03	1.44E-04	1.19E-06	0.00	0.00	0.00	0.00	0.00	0.00	4.95E-07	1.14E-05	1.27E-05	5.22E-07	-1.51E-03
NRSF	MJ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FW	m ³	0.45	3.91E-03	1.19E-04	0.00	0.00	0.00	0.00	0.00	0.00	-1.02E-03	3.09E-04	7.95E-05	-1.08E-03	-0.30
Waste categories															
HWD	kg	3.34	4.53E-02	1.89E-03	0.00	0.00	0.00	0.00	0.00	0.00	2.41E-04	3.56E-03	1.42E-03	2.54E-04	-3.39
NHWD	kg	560.00	0.84	0.69	0.00	0.00	0.00	0.00	0.00	0.00	1.39	6.60E-02	4.33E-02	1.47	-159.00
RWD	kg	1.26E-03	5.76E-06	3.74E-08	0.00	0.00	0.00	0.00	0.00	0.00	5.28E-08	4.54E-07	1.81E-07	5.57E-08	-7.46E-04
Output material flows															
CRU	kg	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MFR	kg	1.95E-02	1.99E-04	1.20E-06	0.00	0.00	0.00	0.00	0.00	0.00	1.70E-06	1.57E-05	0.47	1.79E-06	-1.59E-02
MER	kg	1.37E-04	1.23E-06	1.02E-08	0.00	0.00	0.00	0.00	0.00	0.00	5.88E-09	9.32E-08	3.51E-08	6.21E-09	-5.57E-05
EE	MJ	1.15	4.84E-03	3.73E-05	0.00	0.00	0.00	0.00	0.00	0.00	3.01E-05	3.83E-04	1.39E-04	3.17E-05	-0.18

Key:

GWP-t – global warming potential - total **GWP-f** – global warming potential fossil fuels **GWP-b** – global warming potential - biogenic **GWP-l** – global warming potential - land use and land use change **ODP** – ozone depletion potential **AP** - acidification potential **EP-fw** - eutrophication potential - aquatic freshwater **EP-m** - eutrophication potential - aquatic marine **EP-t** - eutrophication potential - terrestrial **POCP** - photochemical ozone formation potential **ADPF*2** - abiotic depletion potential – fossil resources **ADPE*2** - abiotic depletion potential – minerals&metals **WDP*2** – Water (user) deprivation potential **PERE** - Use of renewable primary energy **PERM** - use of renewable primary energy resources **PERT** - total use of renewable primary energy resources **PENRE** - use of non-renewable primary energy **PENRM** - use of non-renewable primary energy resources **PENRT** - total use of non-renewable primary energy resources **SM** - use of secondary material **RSF** - use of renewable secondary fuels **NRSF** - use of non-renewable secondary fuels **FW** - net use of fresh water **HWD** - hazardous waste disposed **NHWD** - non-hazardous waste disposed **RWD** - radioactive waste disposed **CRU** - components for re-use **MFR** - materials for recycling **MER** - materials for energy recovery **EE** - exported energy



Results per 1 pc PG7 - Drains for bathtubs and shower trays

Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Additional environmental impact indicators															
PM	Disease incidence	1.96E-06	1.72E-07	1.24E-07	0.00	0.00	0.00	0.00	0.00	0.00	6.23E-10	1.47E-08	7.97E-09	6.57E-10	-1.86E-06
IRP*1	kBq U235 eq.	4.94	2.35E-02	1.51E-04	0.00	0.00	0.00	0.00	0.00	0.00	2.16E-04	1.85E-03	7.37E-04	2.28E-04	-3.04
ETP-fw*2	CTUe	442.00	6.46	6.02	2.50E-05	0.00	0.00	0.00	0.00	0.00	2.71	0.51	0.43	2.86	-471.00
HTP-c*2	CTUh	2.80E-07	9.12E-09	1.90E-09	0.00	0.00	0.00	0.00	0.00	0.00	2.82E-11	7.19E-10	2.47E-10	2.97E-11	-1.23E-07
HTP-nc*2	CTUh	1.99E-06	1.75E-08	2.03E-07	6.67E-13	0.00	0.00	0.00	0.00	0.00	1.29E-09	1.39E-09	7.06E-10	1.36E-09	-2.18E-06
SQP*2	dimensionless	359.00	26.30	0.45	0.00	0.00	0.00	0.00	0.00	0.00	0.16	2.11	0.58	0.17	-142.00

Key:

PM – particulate matter emissions potential **IRP*1** – ionizing radiation potential – human health **ETP-fw*2** - Eco-toxicity potential – freshwater **HTP-c*2** - Human toxicity potential – cancer effects **HTP-nc*2** - Human toxicity potential – non-cancer effects **SQP*2** – soil quality potential

Disclaimers

*1 This impact category deals mainly with the eventual impact of low-dose ionising radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionising radiation from the soil, from radon and from some building materials is also not measured by this indicator

*2 The results of this environmental impact indicator shall be used with care as the uncertainties on these results are high or as there is limited experience with the indicator



Results per 1 pc PG8 - Drains for sinks, spouts and appliances

Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Core indicators															
GWP-t	kg CO ₂ eq.	3.29	8.31E-02	0.16	0.00	0.00	0.00	0.00	0.00	0.00	9.22E-03	6.58E-03	1.72E-02	0.61	-3.03
GWP-f	kg CO ₂ eq.	3.25	8.30E-02	1.06E-02	0.00	0.00	0.00	0.00	0.00	0.00	6.29E-04	6.57E-03	1.12E-02	4.15E-02	-3.04
GWP-b	kg CO ₂ eq.	3.17E-02	3.26E-06	0.15	0.00	0.00	0.00	0.00	0.00	0.00	8.59E-03	2.10E-07	6.03E-03	0.57	1.26E-02
GWP-l	kg CO ₂ eq.	5.08E-03	3.46E-05	3.45E-07	0.00	0.00	0.00	0.00	0.00	0.00	1.77E-07	2.67E-06	2.22E-05	1.17E-05	4.82E-04
ODP	kg CFC-11 eq.	2.53E-05	1.33E-09	1.52E-11	0.00	0.00	0.00	0.00	0.00	0.00	4.23E-12	1.03E-10	1.33E-10	2.79E-10	-1.65E-08
AP	mol H ⁺ eq.	7.88E-02	2.10E-04	4.24E-05	0.00	0.00	0.00	0.00	0.00	0.00	2.12E-06	2.74E-05	8.29E-05	1.40E-04	-0.24
EP-fw	kg P eq.	7.02E-03	6.71E-06	1.19E-06	0.00	0.00	0.00	0.00	0.00	0.00	9.44E-07	5.17E-07	3.11E-06	6.22E-05	-1.91E-02
EP-m	kg N eq.	5.45E-03	5.32E-05	9.87E-05	0.00	0.00	0.00	0.00	0.00	0.00	1.77E-05	9.97E-06	2.85E-05	1.17E-03	-1.17E-02
EP-t	mol N eq.	6.69E-02	5.75E-04	2.19E-04	0.00	0.00	0.00	0.00	0.00	0.00	6.60E-06	1.09E-04	2.68E-04	4.35E-04	-0.17
POCP	kg NMVOC-eq.	2.15E-02	3.17E-04	1.04E-04	3.06E-06	0.00	0.00	0.00	0.00	0.00	4.17E-06	3.98E-05	8.43E-05	2.75E-04	-4.64E-02
ADPF*2	MJ	57.90	1.24	1.30E-02	0.00	0.00	0.00	0.00	0.00	0.00	3.99E-03	9.60E-02	0.13	0.26	-31.20
ADPE*2	kg Sb eq.	1.02E-03	2.41E-07	2.86E-09	0.00	0.00	0.00	0.00	0.00	0.00	4.47E-10	1.85E-08	2.07E-07	2.95E-08	-3.32E-03
WDP*2	m ³ world eq. deprived	1.36	5.94E-03	8.65E-04	0.00	0.00	0.00	0.00	0.00	0.00	4.21E-05	4.61E-04	1.36E-03	2.78E-03	7.01
Use of resources															
PERE	MJ	9.47	1.64E-02	2.14E-04	0.00	0.00	0.00	0.00	0.00	0.00	1.24E-04	1.26E-03	8.96E-03	8.16E-03	16.50
PERM	MJ	9.47	1.64E-02	2.14E-04	0.00	0.00	0.00	0.00	0.00	0.00	1.24E-04	1.26E-03	8.96E-03	8.16E-03	16.50
PERT	MJ	9.47	1.64E-02	2.14E-04	0.00	0.00	0.00	0.00	0.00	0.00	1.24E-04	1.26E-03	8.96E-03	8.16E-03	16.50
PENRE	MJ	57.90	1.24	1.30E-02	0.00	0.00	0.00	0.00	0.00	0.00	3.99E-03	9.60E-02	0.13	0.26	-31.20
PENRM	MJ	57.90	1.24	1.30E-02	0.00	0.00	0.00	0.00	0.00	0.00	3.99E-03	9.60E-02	0.13	0.26	-31.20
PENRT	MJ	57.90	1.24	1.30E-02	0.00	0.00	0.00	0.00	0.00	0.00	3.99E-03	9.60E-02	0.13	0.26	-31.20
SM	kg	0.10	5.28E-04	7.27E-06	0.00	0.00	0.00	0.00	0.00	0.00	1.31E-06	4.08E-05	1.23E-04	8.64E-05	-0.22
RSF	MJ	2.51E-03	6.71E-06	1.05E-07	0.00	0.00	0.00	0.00	0.00	0.00	2.26E-08	5.19E-07	5.37E-06	1.49E-06	-1.35E-03
NRSF	MJ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FW	m ³	4.40E-02	1.82E-04	1.15E-05	0.00	0.00	0.00	0.00	0.00	0.00	-4.68E-05	1.41E-05	3.63E-05	-3.08E-03	0.12
Waste categories															
HWD	kg	1.01	2.11E-03	1.79E-04	0.00	0.00	0.00	0.00	0.00	0.00	1.10E-05	1.63E-04	6.42E-04	7.26E-04	-1.20
NHWD	kg	32.30	3.92E-02	5.49E-02	0.00	0.00	0.00	0.00	0.00	0.00	6.36E-02	3.02E-03	1.93E-02	4.19	-60.80
RWD	kg	9.51E-05	2.68E-07	3.09E-09	0.00	0.00	0.00	0.00	0.00	0.00	2.42E-09	2.07E-08	8.53E-08	1.59E-07	4.93E-05
Output material flows															
CRU	kg	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MFR	kg	2.66E-03	9.28E-06	9.76E-08	0.00	0.00	0.00	0.00	0.00	0.00	7.76E-08	7.17E-07	0.22	5.12E-06	-4.63E-03
MER	kg	3.76E-05	5.71E-08	8.47E-10	0.00	0.00	0.00	0.00	0.00	0.00	2.69E-10	4.26E-09	1.55E-08	1.77E-08	-1.84E-05
EE	MJ	5.14E-02	2.25E-04	3.15E-06	0.00	0.00	0.00	0.00	0.00	0.00	1.38E-06	1.75E-05	6.08E-05	9.07E-05	-4.51E-02

Key:

GWP-t – global warming potential - total **GWP-f** – global warming potential fossil fuels **GWP-b** – global warming potential - biogenic **GWP-l** – global warming potential - land use and land use change **ODP** – ozone depletion potential **AP** - acidification potential **EP-fw** - eutrophication potential - aquatic freshwater **EP-m** - eutrophication potential - aquatic marine **EP-t** - eutrophication potential - terrestrial **POCP** - photochemical ozone formation potential **ADPF*2** - abiotic depletion potential – fossil resources **ADPE*2** - abiotic depletion potential – minerals&metals **WDP*2** – Water (user) deprivation potential **PERE** - Use of renewable primary energy **PERM** - use of renewable primary energy resources **PERT** - total use of renewable primary energy resources **PENRE** - use of non-renewable primary energy **PENRM** - use of non-renewable primary energy resources **PENRT** - total use of non-renewable primary energy resources **SM** - use of secondary material **RSF** - use of renewable secondary fuels **NRSF** - use of non-renewable secondary fuels **FW** - net use of fresh water **HWD** - hazardous waste disposed **NHWD** - non-hazardous waste disposed **RWD** - radioactive waste disposed **CRU** - components for re-use **MFR** - materials for recycling **MER** - materials for energy recovery **EE** - exported energy



Results per 1 pc PG8 - Drains for sinks, spouts and appliances

Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Additional environmental impact indicators															
PM	Disease incidence	2.67E-07	8.02E-09	1.21E-08	0.00	0.00	0.00	0.00	0.00	0.00	2.85E-11	6.73E-10	2.94E-09	1.88E-09	-5.02E-07
IRP*1	kBq U235 eq.	0.34	1.09E-03	1.25E-05	0.00	0.00	0.00	0.00	0.00	0.00	9.88E-06	8.47E-05	3.46E-04	6.51E-04	9.49E-02
ETP-fw*2	CTUe	113.00	0.30	0.44	2.50E-05	0.00	0.00	0.00	0.00	0.00	0.12	2.31E-02	0.16	8.18	-273.00
HTP-c*2	CTUh	3.55E-08	4.25E-10	1.45E-10	0.00	0.00	0.00	0.00	0.00	0.00	1.29E-12	3.29E-11	9.76E-11	8.49E-11	-4.75E-08
HTP-nc*2	CTUh	7.59E-07	8.15E-10	1.19E-08	6.66E-13	0.00	0.00	0.00	0.00	0.00	5.89E-11	6.34E-11	3.30E-10	3.89E-09	-2.51E-06
SQP*2	dimensionless	37.90	1.23	3.58E-02	0.00	0.00	0.00	0.00	0.00	0.00	7.44E-03	9.66E-02	0.24	0.49	-76.20

Key:

PM – particulate matter emissions potential **IRP*1** – ionizing radiation potential – human health **ETP-fw*2** - Eco-toxicity potential – freshwater **HTP-c*2** - Human toxicity potential – cancer effects **HTP-nc*2** - Human toxicity potential – non-cancer effects **SQP*2** – soil quality potential

Disclaimers

*1 This impact category deals mainly with the eventual impact of low-dose ionising radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionising radiation from the soil, from radon and from some building materials is also not measured by this indicator

*2 The results of this environmental impact indicator shall be used with care as the uncertainties on these results are high or as there is limited experience with the indicator



Results per 1 pc PG9 - Drains for urinals

Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Core indicators															
GWP-t	kg CO ₂ eq.	2.33	3.36E-02	0.19	0.00	0.00	0.00	0.00	0.00	0.00	3.41E-03	2.43E-03	2.12E-04	3.46E-03	-0.83
GWP-f	kg CO ₂ eq.	2.28	3.36E-02	1.43E-02	0.00	0.00	0.00	0.00	0.00	0.00	2.33E-04	2.43E-03	1.25E-04	2.36E-04	-0.83
GWP-b	kg CO ₂ eq.	4.09E-02	1.32E-06	0.17	0.00	0.00	0.00	0.00	0.00	0.00	3.18E-03	7.78E-08	8.74E-05	3.22E-03	-3.48E-05
GWP-l	kg CO ₂ eq.	2.64E-03	1.40E-05	4.18E-07	0.00	0.00	0.00	0.00	0.00	0.00	6.56E-08	9.88E-07	2.76E-07	6.65E-08	-5.67E-04
ODP	kg CFC-11 eq.	3.15E-07	5.38E-10	1.85E-11	0.00	0.00	0.00	0.00	0.00	0.00	1.56E-12	3.79E-11	1.49E-12	1.59E-12	-1.49E-08
AP	mol H ⁺ eq.	6.55E-03	8.52E-05	5.13E-05	0.00	0.00	0.00	0.00	0.00	0.00	7.84E-07	1.01E-05	8.28E-07	7.95E-07	-3.46E-03
EP-fw	kg P eq.	1.58E-03	2.72E-06	1.37E-06	0.00	0.00	0.00	0.00	0.00	0.00	3.49E-07	1.91E-07	2.67E-08	3.54E-07	-2.56E-04
EP-m	kg N eq.	1.52E-03	2.15E-05	1.19E-04	0.00	0.00	0.00	0.00	0.00	0.00	6.56E-06	3.69E-06	3.26E-07	6.66E-06	-5.94E-04
EP-t	mol N eq.	1.34E-02	2.33E-04	2.66E-04	0.00	0.00	0.00	0.00	0.00	0.00	2.44E-06	4.02E-05	2.91E-06	2.47E-06	-6.24E-03
POCP	kg NMVOC-eq.	8.84E-03	1.28E-04	1.23E-04	3.06E-06	0.00	0.00	0.00	0.00	0.00	1.54E-06	1.47E-05	9.30E-07	1.56E-06	-2.89E-03
ADPF*2	MJ	62.30	0.50	1.58E-02	0.00	0.00	0.00	0.00	0.00	0.00	1.48E-03	3.55E-02	1.48E-03	1.50E-03	-15.60
ADPE*2	kg Sb eq.	2.27E-05	9.77E-08	3.47E-09	0.00	0.00	0.00	0.00	0.00	0.00	1.65E-10	6.83E-09	1.06E-09	1.68E-10	-1.34E-05
WDP*2	m ³ world eq. deprived	0.48	2.41E-03	1.07E-03	0.00	0.00	0.00	0.00	0.00	0.00	1.56E-05	1.70E-04	1.33E-05	1.58E-05	-0.16
Use of resources															
PERE	MJ	5.70	6.62E-03	2.61E-04	0.00	0.00	0.00	0.00	0.00	0.00	4.58E-05	4.66E-04	6.81E-05	4.65E-05	-0.68
PERM	MJ	5.70	6.62E-03	2.61E-04	0.00	0.00	0.00	0.00	0.00	0.00	4.58E-05	4.66E-04	6.81E-05	4.65E-05	-0.68
PERT	MJ	5.70	6.62E-03	2.61E-04	0.00	0.00	0.00	0.00	0.00	0.00	4.58E-05	4.66E-04	6.81E-05	4.65E-05	-0.68
PENRE	MJ	62.30	0.50	1.58E-02	0.00	0.00	0.00	0.00	0.00	0.00	1.48E-03	3.55E-02	1.48E-03	1.50E-03	-15.60
PENRM	MJ	62.30	0.50	1.58E-02	0.00	0.00	0.00	0.00	0.00	0.00	1.48E-03	3.55E-02	1.48E-03	1.50E-03	-15.60
PENRT	MJ	62.30	0.50	1.58E-02	0.00	0.00	0.00	0.00	0.00	0.00	1.48E-03	3.55E-02	1.48E-03	1.50E-03	-15.60
SM	kg	1.01E-02	2.14E-04	8.79E-06	0.00	0.00	0.00	0.00	0.00	0.00	4.85E-07	1.51E-05	1.29E-06	4.91E-07	-2.66E-03
RSF	MJ	1.21E-03	2.72E-06	1.29E-07	0.00	0.00	0.00	0.00	0.00	0.00	8.38E-09	1.92E-07	5.68E-08	8.50E-09	-1.76E-05
NRSF	MJ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FW	m ³	1.39E-02	7.37E-05	1.43E-05	0.00	0.00	0.00	0.00	0.00	0.00	-1.73E-05	5.23E-06	3.47E-07	-1.76E-05	-4.35E-03
Waste categories															
HWD	kg	9.45E-02	8.55E-04	2.22E-04	0.00	0.00	0.00	0.00	0.00	0.00	4.07E-06	6.02E-05	6.22E-06	4.13E-06	-4.97E-02
NHWD	kg	15.80	1.59E-02	6.64E-02	0.00	0.00	0.00	0.00	0.00	0.00	2.35E-02	1.12E-03	1.90E-04	2.39E-02	-2.08
RWD	kg	7.85E-05	1.09E-07	3.76E-09	0.00	0.00	0.00	0.00	0.00	0.00	8.93E-10	7.67E-09	7.78E-10	9.06E-10	-1.28E-05
Output material flows															
CRU	kg	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MFR	kg	6.75E-04	3.76E-06	1.18E-07	0.00	0.00	0.00	0.00	0.00	0.00	2.87E-08	2.65E-07	2.03E-03	2.91E-08	-2.13E-04
MER	kg	2.60E-06	2.31E-08	1.03E-09	0.00	0.00	0.00	0.00	0.00	0.00	9.95E-11	1.58E-09	1.55E-10	1.01E-10	-7.66E-07
EE	MJ	3.00E-02	9.12E-05	3.84E-06	0.00	0.00	0.00	0.00	0.00	0.00	5.09E-07	6.47E-06	6.17E-07	5.16E-07	-2.57E-03

Key:

GWP-t – global warming potential - total **GWP-f** – global warming potential fossil fuels **GWP-b** – global warming potential - biogenic **GWP-l** – global warming potential - land use and land use change **ODP** – ozone depletion potential **AP** - acidification potential **EP-fw** - eutrophication potential - aquatic freshwater **EP-m** - eutrophication potential - aquatic marine **EP-t** - eutrophication potential - terrestrial **POCP** - photochemical ozone formation potential **ADPF*2** - abiotic depletion potential – fossil resources **ADPE*2** - abiotic depletion potential – minerals&metals **WDP*2** – Water (user) deprivation potential **PERE** - Use of renewable primary energy **PERM** - use of renewable primary energy resources **PERT** - total use of renewable primary energy resources **PENRE** - use of non-renewable primary energy **PENRM** - use of non-renewable primary energy resources **PENRT** - total use of non-renewable primary energy resources **SM** - use of secondary material **RSF** - use of renewable secondary fuels **NRSF** - use of non-renewable secondary fuels **FW** - net use of fresh water **HWD** - hazardous waste disposed **NHWD** - non-hazardous waste disposed **RWD** - radioactive waste disposed **CRU** - components for re-use **MFR** - materials for recycling **MER** - materials for energy recovery **EE** - exported energy



Results per 1 pc PG9 - Drains for urinals

Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Additional environmental impact indicators															
PM	Disease incidence	4.49E-08	3.25E-09	1.50E-08	0.00	0.00	0.00	0.00	0.00	0.00	1.05E-11	2.49E-10	3.71E-11	1.07E-11	-2.79E-08
IRP*1	kBq U235 eq.	0.27	4.43E-04	1.52E-05	0.00	0.00	0.00	0.00	0.00	0.00	3.65E-06	3.13E-05	3.18E-06	3.71E-06	-5.25E-02
ETP-fw*2	CTUe	9.56	0.12	0.52	2.50E-05	0.00	0.00	0.00	0.00	0.00	4.59E-02	8.55E-03	1.98E-03	4.65E-02	-4.64
HTP-c*2	CTUh	7.94E-09	1.72E-10	1.75E-10	0.00	0.00	0.00	0.00	0.00	0.00	4.77E-13	1.22E-11	1.13E-12	4.83E-13	-1.73E-09
HTP-nc*2	CTUh	2.52E-08	3.30E-10	1.36E-08	6.66E-13	0.00	0.00	0.00	0.00	0.00	2.18E-11	2.35E-11	3.05E-12	2.21E-11	-1.24E-08
SQP*2	dimensionless	14.30	0.50	4.33E-02	0.00	0.00	0.00	0.00	0.00	0.00	2.75E-03	3.57E-02	2.63E-03	2.79E-03	-1.72

Key:

PM – particulate matter emissions potential **IRP*1** – ionizing radiation potential – human health **ETP-fw*2** - Eco-toxicity potential – freshwater **HTP-c*2** - Human toxicity potential – cancer effects **HTP-nc*2** - Human toxicity potential – non-cancer effects **SQP*2** – soil quality potential

Disclaimers

*1 This impact category deals mainly with the eventual impact of low-dose ionising radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionising radiation from the soil, from radon and from some building materials is also not measured by this indicator

*2 The results of this environmental impact indicator shall be used with care as the uncertainties on these results are high or as there is limited experience with the indicator



Results per 1 pc PG10 - Drains for washbasins and bidets

Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Core indicators															
GWP-t	kg CO ₂ eq.	5.11	0.13	0.34	0.00	0.00	0.00	0.00	0.00	0.00	1.37E-02	9.79E-03	4.66E-02	0.91	-4.83
GWP-f	kg CO ₂ eq.	5.10	0.13	9.13E-02	0.00	0.00	0.00	0.00	0.00	0.00	9.36E-04	9.78E-03	2.86E-02	6.19E-02	-4.85
GWP-b	kg CO ₂ eq.	-3.44E-03	5.18E-06	0.25	0.00	0.00	0.00	0.00	0.00	0.00	1.28E-02	3.13E-07	1.79E-02	0.85	1.48E-02
GWP-l	kg CO ₂ eq.	8.58E-03	5.49E-05	1.39E-06	0.00	0.00	0.00	0.00	0.00	0.00	2.64E-07	3.97E-06	6.05E-05	1.74E-05	-2.00E-03
ODP	kg CFC-11 eq.	9.53E-08	2.11E-09	6.22E-11	0.00	0.00	0.00	0.00	0.00	0.00	6.29E-12	1.53E-10	3.42E-10	4.16E-10	-3.00E-08
AP	mol H ⁺ eq.	0.21	3.34E-04	1.68E-04	0.00	0.00	0.00	0.00	0.00	0.00	3.15E-06	4.07E-05	2.01E-04	2.09E-04	-0.41
EP-fw	kg P eq.	1.77E-02	1.07E-05	2.23E-06	0.00	0.00	0.00	0.00	0.00	0.00	1.40E-06	7.69E-07	7.01E-06	9.29E-05	-3.29E-02
EP-m	kg N eq.	1.22E-02	8.44E-05	3.91E-04	0.00	0.00	0.00	0.00	0.00	0.00	2.64E-05	1.48E-05	7.41E-05	1.75E-03	-2.01E-02
EP-t	mol N eq.	0.16	9.14E-04	9.13E-04	0.00	0.00	0.00	0.00	0.00	0.00	9.81E-06	1.62E-04	6.78E-04	6.49E-04	-0.29
POCP	kg NMVOC-eq.	4.83E-02	5.04E-04	3.43E-04	3.06E-06	0.00	0.00	0.00	0.00	0.00	6.20E-06	5.91E-05	2.15E-04	4.10E-04	-7.90E-02
ADPF*2	MJ	83.50	1.98	5.21E-02	0.00	0.00	0.00	0.00	0.00	0.00	5.94E-03	0.14	0.34	0.39	-51.70
ADPE*2	kg Sb eq.	2.89E-03	3.83E-07	1.17E-08	0.00	0.00	0.00	0.00	0.00	0.00	6.65E-10	2.75E-08	3.79E-07	4.39E-08	-5.75E-03
WDP*2	m ³ world eq. deprived	3.12	9.44E-03	4.08E-03	0.00	0.00	0.00	0.00	0.00	0.00	6.26E-05	6.85E-04	3.26E-03	4.14E-03	7.15
Use of resources															
PERE	MJ	16.80	2.60E-02	9.00E-04	0.00	0.00	0.00	0.00	0.00	0.00	1.84E-04	1.88E-03	1.91E-02	1.22E-02	15.40
PERM	MJ	16.80	2.60E-02	9.00E-04	0.00	0.00	0.00	0.00	0.00	0.00	1.84E-04	1.88E-03	1.91E-02	1.22E-02	15.40
PERT	MJ	16.80	2.60E-02	9.00E-04	0.00	0.00	0.00	0.00	0.00	0.00	1.84E-04	1.88E-03	1.91E-02	1.22E-02	15.40
PENRE	MJ	83.50	1.98	5.21E-02	0.00	0.00	0.00	0.00	0.00	0.00	5.94E-03	0.14	0.34	0.39	-51.70
PENRM	MJ	83.50	1.98	5.21E-02	0.00	0.00	0.00	0.00	0.00	0.00	5.94E-03	0.14	0.34	0.39	-51.70
PENRT	MJ	83.50	1.98	5.21E-02	0.00	0.00	0.00	0.00	0.00	0.00	5.94E-03	0.14	0.34	0.39	-51.70
SM	kg	0.21	8.39E-04	2.84E-05	0.00	0.00	0.00	0.00	0.00	0.00	1.95E-06	6.07E-05	3.06E-04	1.29E-04	-0.29
RSF	MJ	6.64E-03	1.07E-05	4.76E-07	0.00	0.00	0.00	0.00	0.00	0.00	3.37E-08	7.72E-07	1.34E-05	2.23E-06	-2.04E-03
NRSF	MJ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FW	m ³	0.10	2.89E-04	5.71E-05	0.00	0.00	0.00	0.00	0.00	0.00	-6.96E-05	2.10E-05	8.60E-05	-4.60E-03	9.60E-02
Waste categories															
HWD	kg	1.56	3.35E-03	8.71E-04	0.00	0.00	0.00	0.00	0.00	0.00	1.64E-05	2.42E-04	1.53E-03	1.08E-03	-1.56
NHWD	kg	74.30	6.23E-02	0.22	0.00	0.00	0.00	0.00	0.00	0.00	9.46E-02	4.49E-03	4.65E-02	6.26	-110.00
RWD	kg	1.55E-04	4.26E-07	1.27E-08	0.00	0.00	0.00	0.00	0.00	0.00	3.59E-09	3.09E-08	1.98E-07	2.38E-07	1.67E-05
Output material flows															
CRU	kg	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MFR	kg	6.62E-03	1.47E-05	3.93E-07	0.00	0.00	0.00	0.00	0.00	0.00	1.16E-07	1.07E-06	0.52	7.64E-06	-9.16E-03
MER	kg	5.17E-05	9.07E-08	3.51E-09	0.00	0.00	0.00	0.00	0.00	0.00	4.00E-10	6.34E-09	3.76E-08	2.65E-08	-2.56E-05
EE	MJ	8.36E-02	3.58E-04	1.34E-05	0.00	0.00	0.00	0.00	0.00	0.00	2.05E-06	2.60E-05	1.48E-04	1.35E-04	-6.97E-02

Key:

GWP-t – global warming potential - total **GWP-f** – global warming potential fossil fuels **GWP-b** – global warming potential - biogenic **GWP-l** – global warming potential - land use and land use change **ODP** – ozone depletion potential **AP** - acidification potential **EP-fw** - eutrophication potential - aquatic freshwater **EP-m** - eutrophication potential - aquatic marine **EP-t** - eutrophication potential - terrestrial **POCP** - photochemical ozone formation potential **ADPF*2** - abiotic depletion potential – fossil resources **ADPE*2** - abiotic depletion potential – minerals&metals **WDP*2** – Water (user) deprivation potential **PERE** - Use of renewable primary energy **PERM** - use of renewable primary energy resources **PERT** - total use of renewable primary energy resources **PENRE** - use of non-renewable primary energy **PENRM** - use of non-renewable primary energy resources **PENRT** - total use of non-renewable primary energy resources **SM** - use of secondary material **RSF** - use of renewable secondary fuels **NRSF** - use of non-renewable secondary fuels **FW** - net use of fresh water **HWD** - hazardous waste disposed **NHWD** - non-hazardous waste disposed **RWD** - radioactive waste disposed **CRU** - components for re-use **MFR** - materials for recycling **MER** - materials for energy recovery **EE** - exported energy



Results per 1 pc PG10 - Drains for washbasins and bidets

Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D	
Additional environmental impact indicators																
PM	Disease incidence	5.66E-07	1.27E-08	6.02E-08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.24E-11	1.00E-09	8.07E-09	2.80E-09	-8.55E-07
IRP*1	kBq U235 eq.	0.57	1.74E-03	5.14E-05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.47E-05	1.26E-04	8.06E-04	9.72E-04	-4.81E-02
ETP-fw*2	CTUe	275.00	0.48	1.44	2.50E-05	0.00	0.00	0.00	0.00	0.00	0.00	0.19	3.44E-02	0.43	12.20	-488.00
HTP-c*2	CTUh	5.58E-08	6.74E-10	5.33E-10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.92E-12	4.89E-11	2.55E-10	1.27E-10	-6.61E-08
HTP-nc*2	CTUh	2.15E-06	1.29E-09	2.15E-08	6.66E-13	0.00	0.00	0.00	0.00	0.00	0.00	8.77E-11	9.44E-11	7.71E-10	5.80E-09	-4.33E-06
SQP*2	dimensionless	86.20	1.95	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.11E-02	0.14	0.61	0.73	-130.00

Key:

PM – particulate matter emissions potential **IRP*1** – ionizing radiation potential – human health **ETP-fw*2** - Eco-toxicity potential – freshwater **HTP-c*2** - Human toxicity potential – cancer effects **HTP-nc*2** - Human toxicity potential – non-cancer effects **SQP*2** – soil quality potential

Disclaimers

*1 This impact category deals mainly with the eventual impact of low-dose ionising radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionising radiation from the soil, from radon and from some building materials is also not measured by this indicator

*2 The results of this environmental impact indicator shall be used with care as the uncertainties on these results are high or as there is limited experience with the indicator



Results per 1 pc PG11 - Electronic mixing unit

Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Core indicators															
GWP-t	kg CO ₂ eq.	10.20	0.26	8.66	0.00	0.00	0.00	0.00	229.00	0.00	1.30E-02	9.30E-03	0.12	0.29	-10.10
GWP-f	kg CO ₂ eq.	13.30	0.26	9.49E-02	0.00	0.00	0.00	0.00	221.00	0.00	8.90E-04	9.30E-03	7.77E-02	1.98E-02	-10.10
GWP-b	kg CO ₂ eq.	-3.05	1.01E-05	8.57	0.00	0.00	0.00	0.00	7.79	0.00	1.22E-02	2.98E-07	4.22E-02	0.27	-3.42E-02
GWP-l	kg CO ₂ eq.	2.78E-02	1.08E-04	1.41E-05	0.00	0.00	0.00	0.00	0.67	0.00	2.51E-07	3.78E-06	1.59E-04	5.58E-06	-1.54E-02
ODP	kg CFC-11 eq.	2.45E-07	4.13E-09	6.20E-10	0.00	0.00	0.00	0.00	4.07E-06	0.00	5.98E-12	1.45E-10	8.53E-10	1.33E-10	-1.37E-07
AP	mol H ⁺ eq.	0.51	6.55E-04	1.76E-03	0.00	0.00	0.00	0.00	1.30	0.00	3.00E-06	3.87E-05	5.02E-04	6.67E-05	-0.43
EP-fw	kg P eq.	3.94E-02	2.09E-05	6.68E-05	0.00	0.00	0.00	0.00	0.21	0.00	1.34E-06	7.32E-07	2.06E-05	2.97E-05	-3.07E-02
EP-m	kg N eq.	3.33E-02	1.65E-04	4.10E-03	0.00	0.00	0.00	0.00	0.20	0.00	2.51E-05	1.41E-05	1.78E-04	5.58E-04	-2.55E-02
EP-t	mol N eq.	0.56	1.79E-03	8.78E-03	0.00	0.00	0.00	0.00	1.83	0.00	9.33E-06	1.54E-04	1.63E-03	2.07E-04	-0.45
POCP	kg NMVOC-eq.	0.12	9.86E-04	4.77E-03	3.06E-06	0.00	0.00	0.00	0.60	0.00	5.90E-06	5.62E-05	5.14E-04	1.31E-04	-9.09E-02
ADPF*2	MJ	198.00	3.87	0.54	0.00	0.00	0.00	0.00	5,140.00	0.00	5.65E-03	0.14	0.94	0.13	-136.00
ADPE*2	kg Sb eq.	6.06E-03	7.50E-07	1.16E-07	0.00	0.00	0.00	0.00	2.98E-03	0.00	6.32E-10	2.61E-08	7.23E-07	1.41E-08	-5.23E-03
WDP*2	m ³ world eq. deprived	8.62	1.85E-02	3.14E-02	0.00	0.00	0.00	0.00	140.00	0.00	5.95E-05	6.52E-04	1.00E-02	1.32E-03	-6.17
Use of resources															
PERE	MJ	107.00	5.09E-02	8.54E-03	0.00	0.00	0.00	0.00	1,410.00	0.00	1.75E-04	1.78E-03	6.08E-02	3.90E-03	-22.30
PERM	MJ	107.00	5.09E-02	8.54E-03	0.00	0.00	0.00	0.00	1,410.00	0.00	1.75E-04	1.78E-03	6.08E-02	3.90E-03	-22.30
PERT	MJ	107.00	5.09E-02	8.54E-03	0.00	0.00	0.00	0.00	1,410.00	0.00	1.75E-04	1.78E-03	6.08E-02	3.90E-03	-22.30
PENRE	MJ	198.00	3.87	0.54	0.00	0.00	0.00	0.00	5,140.00	0.00	5.65E-03	0.14	0.94	0.13	-136.00
PENRM	MJ	198.00	3.87	0.54	0.00	0.00	0.00	0.00	5,140.00	0.00	5.65E-03	0.14	0.94	0.13	-136.00
PENRT	MJ	198.00	3.87	0.54	0.00	0.00	0.00	0.00	5,140.00	0.00	5.65E-03	0.14	0.94	0.13	-136.00
SM	kg	0.32	1.64E-03	3.05E-04	0.00	0.00	0.00	0.00	0.85	0.00	1.85E-06	5.77E-05	7.02E-04	4.12E-05	-0.25
RSF	MJ	5.48E-03	2.09E-05	3.97E-06	0.00	0.00	0.00	0.00	6.78E-03	0.00	3.20E-08	7.34E-07	3.67E-05	7.13E-07	-1.80E-03
NRSF	MJ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FW	m ³	0.26	5.66E-04	4.00E-04	0.00	0.00	0.00	0.00	4.44	0.00	-6.62E-05	2.00E-05	2.71E-04	-1.47E-03	-0.19
Waste categories															
HWD	kg	2.80	6.56E-03	6.34E-03	0.00	0.00	0.00	0.00	13.00	0.00	1.56E-05	2.30E-04	4.53E-03	3.47E-04	-2.20
NHWD	kg	155.00	0.12	2.31	0.00	0.00	0.00	0.00	1,010.00	0.00	9.00E-02	4.27E-03	0.13	2.00	-121.00
RWD	kg	4.15E-04	8.33E-07	1.25E-07	0.00	0.00	0.00	0.00	3.65E-02	0.00	3.42E-09	2.93E-08	8.71E-07	7.60E-08	-2.53E-04
Output material flows															
CRU	kg	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MFR	kg	1.63E-02	2.89E-05	4.01E-06	0.00	0.00	0.00	0.00	0.53	0.00	1.10E-07	1.01E-06	1.02	2.44E-06	-1.31E-02
MER	kg	5.33E-05	1.78E-07	3.41E-08	0.00	0.00	0.00	0.00	7.19E-05	0.00	3.81E-10	6.03E-09	9.24E-08	8.46E-09	-3.86E-05
EE	MJ	0.26	7.01E-04	1.25E-04	0.00	0.00	0.00	0.00	23.80	0.00	1.95E-06	2.47E-05	5.04E-04	4.33E-05	-0.13

Key:

GWP-t – global warming potential - total **GWP-f** – global warming potential fossil fuels **GWP-b** – global warming potential - biogenic **GWP-l** – global warming potential - land use and land use change **ODP** – ozone depletion potential **AP** - acidification potential **EP-fw** - eutrophication potential - aquatic freshwater **EP-m** - eutrophication potential - aquatic marine **EP-t** - eutrophication potential - terrestrial **POCP** - photochemical ozone formation potential **ADPF*2** - abiotic depletion potential – fossil resources **ADPE*2** - abiotic depletion potential – minerals&metals **WDP*2** – Water (user) deprivation potential **PERE** - Use of renewable primary energy **PERM** - use of renewable primary energy resources **PERT** - total use of renewable primary energy resources **PENRE** - use of non-renewable primary energy **PENRM** - use of non-renewable primary energy resources **PENRT** - total use of non-renewable primary energy resources **SM** - use of secondary material **RSF** - use of renewable secondary fuels **NRSF** - use of non-renewable secondary fuels **FW** - net use of fresh water **HWD** - hazardous waste disposed **NHWD** - non-hazardous waste disposed **RWD** - radioactive waste disposed **CRU** - components for re-use **MFR** - materials for recycling **MER** - materials for energy recovery **EE** - exported energy



Results per 1 pc PG11 - Electronic mixing unit

Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D	
Additional environmental impact indicators																
PM	Disease incidence	1.67E-06	2.49E-08	4.18E-07	0.00	0.00	0.00	0.00	0.00	4.63E-06	0.00	4.03E-11	9.52E-10	1.90E-08	8.97E-10	-1.34E-06
IRP*1	kBq U235 eq.	1.58	3.41E-03	5.05E-04	0.00	0.00	0.00	0.00	0.00	142.00	0.00	1.40E-05	1.20E-04	3.56E-03	3.11E-04	-0.99
ETP-fw*2	CTUe	712.00	0.94	20.00	2.50E-05	0.00	0.00	0.00	0.00	919.00	0.00	0.18	3.27E-02	1.04	3.90	-585.00
HTP-c*2	CTUh	1.24E-07	1.32E-09	6.34E-09	0.00	0.00	0.00	0.00	0.00	5.25E-07	0.00	1.82E-12	4.65E-11	6.00E-10	4.05E-11	-8.72E-08
HTP-nc*2	CTUh	4.60E-06	2.53E-09	6.71E-07	6.66E-13	0.00	0.00	0.00	0.00	3.89E-06	0.00	8.34E-11	8.97E-11	2.01E-09	1.85E-09	-3.93E-06
SQP*2	dimensionless	579.00	3.81	1.48	0.00	0.00	0.00	0.00	0.00	1,140.00	0.00	1.05E-02	0.14	1.37	0.23	-135.00

Key:

PM – particulate matter emissions potential **IRP*1** – ionizing radiation potential – human health **ETP-fw*2** - Eco-toxicity potential – freshwater **HTP-c*2** - Human toxicity potential – cancer effects **HTP-nc*2** - Human toxicity potential – non-cancer effects **SQP*2** – soil quality potential

Disclaimers

*1 This impact category deals mainly with the eventual impact of low-dose ionising radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionising radiation from the soil, from radon and from some building materials is also not measured by this indicator

*2 The results of this environmental impact indicator shall be used with care as the uncertainties on these results are high or as there is limited experience with the indicator

6.4 Interpretation, LCA presentation and critical review

Evaluation

The differences in the environmental impact of the products lie in the various pre-products and raw materials used and in the mass of the pre-products and raw materials used in each case.

The LCA covers the complete life cycle. Only the Cluster backwater valves and electronic mixing unit have emissions in the utilisation phase (B6). In addition, it is assumed that all product groups have contact with the indoor air. B1 (VOC mixed calculation) is therefore taken into account.

When analyzing the results, it is important to ensure that 1 unit is always used as the functional unit for the clusters:

- Backwater valves 1 pc
- Bathroom and balcony drains 1 pc
- Floor and cellar drains 1 pc
- Shower channels 1 pc
- Grates for shower channels 1 pc
- Accessories 1 pc
- Drains for bath and shower tray 1 pc
- Drains for sinks, spouts and appliances 1 pc
- Drains for urinal 1 pc
- Drains for washbasins and bidets 1 pc
- Electronic mixing unit 1 pc

The influence of life cycle phase B6 is significant for the product groups where electricity is consumed during the use phase (backwater valves and electronic mixing unit).

For all product groups (with the exception of the electronic mixing unit), life cycle phases A1-A3 are the most dominant in terms of total GWP.

Due to the high proportion of stainless steel, the product group shower channel has a high recycling potential.

The product groups shower channel and electronic mixing unit have a large proportion of packaging, including biogenic C. As a result, the share of GWP - biogenic in life cycle phase A1-A3 is negative.

The absolute values of the raw material input are directly related to the weights of the various product groups. In addition, the influence of raw materials is more significant in the product groups with electronic components (backwater valves and electronic mixing units).

The breakdown of the major environmental impacts is shown in the diagram below.

The values obtained from the LCA calculation are suitable for the certification of buildings.

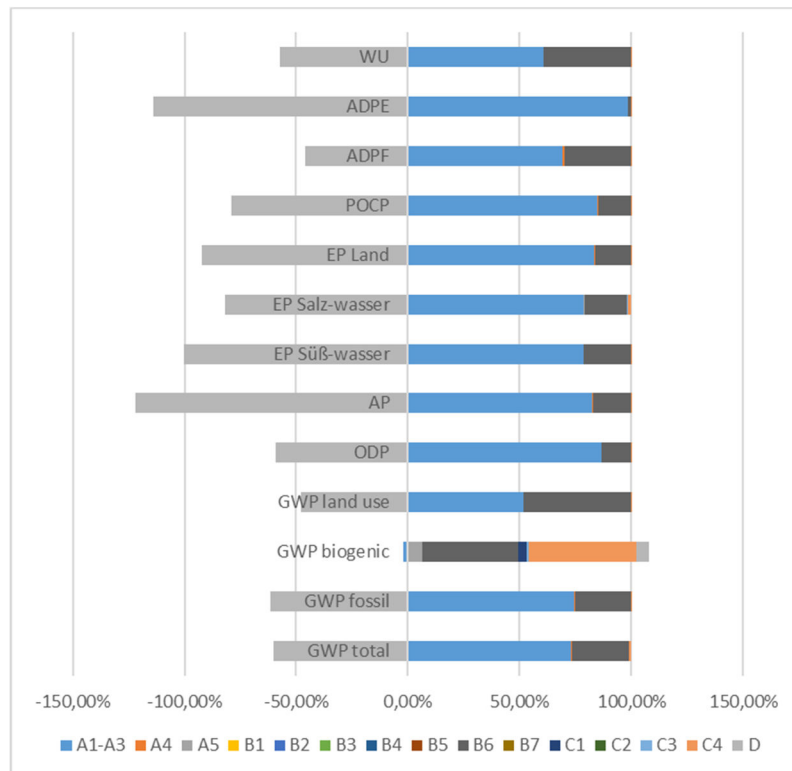


Illustration 12 Percentage of the modules in selected environmental impact indicators – Backwater valves

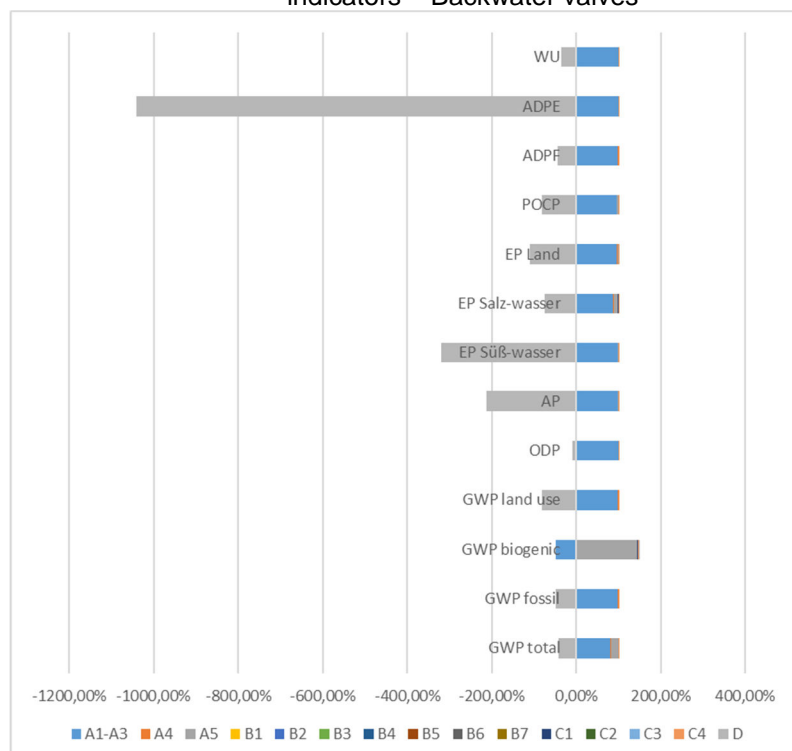


Illustration 13 Percentage of the modules in selected environmental impact categories - Bathroom and balcony drains

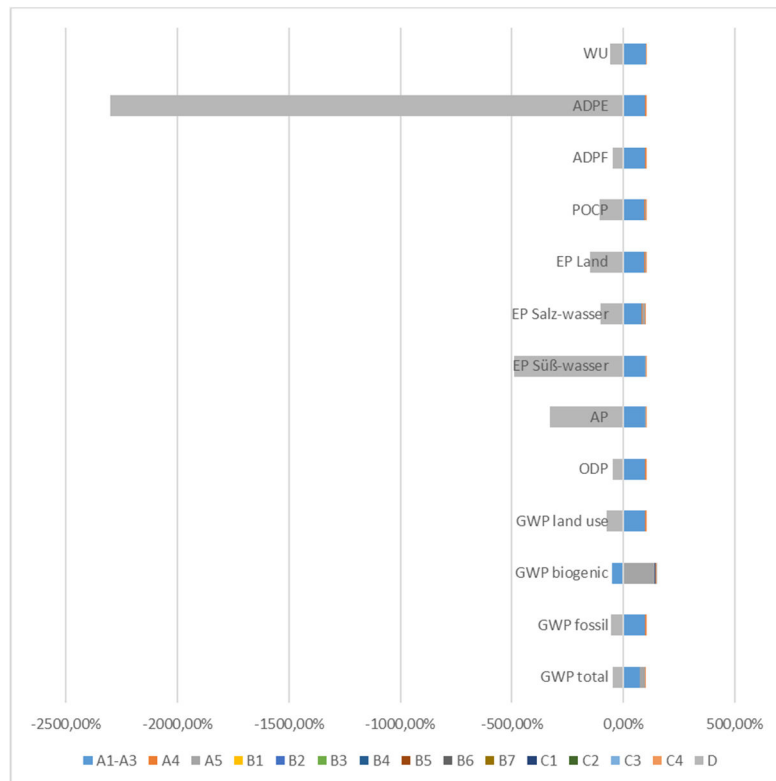


Illustration 14 Percentage of the modules in selected environmental impact categories - Floor and cellar drains

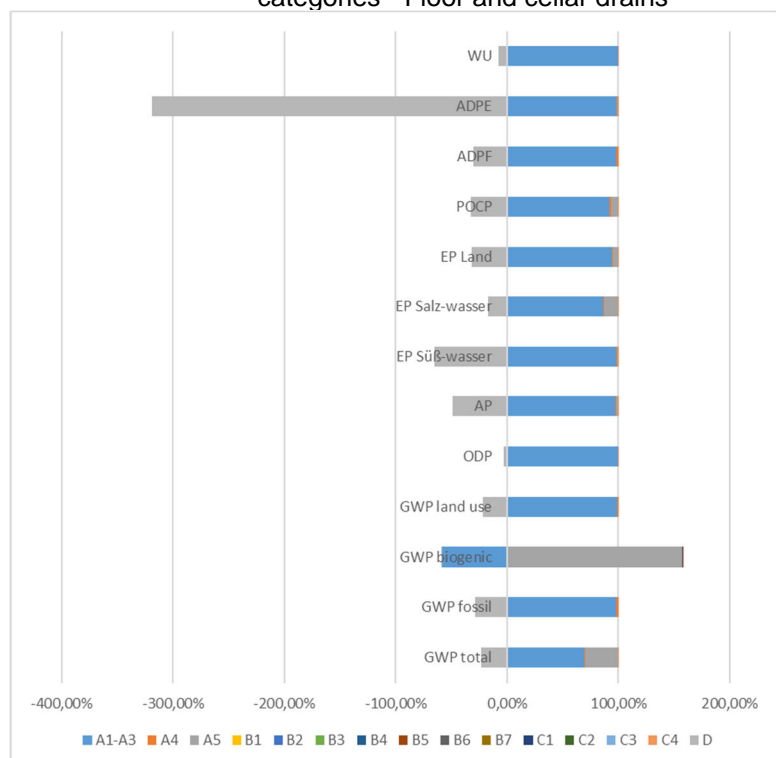


Illustration 15 Percentage of the modules in selected environmental impact categories - Shower channel

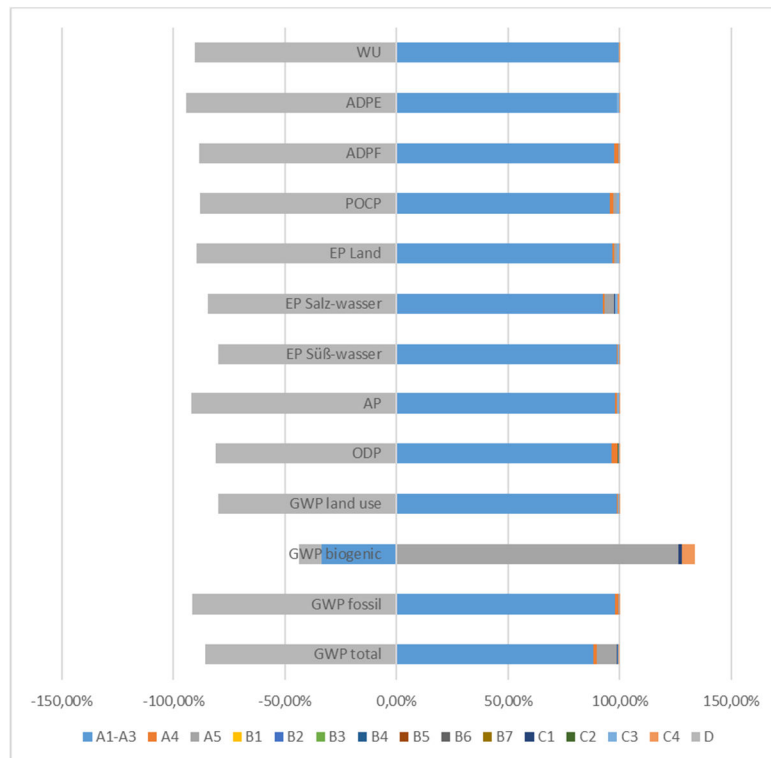


Illustration 16 Percentage of the modules in selected environmental impact categories - Grates for shower channel

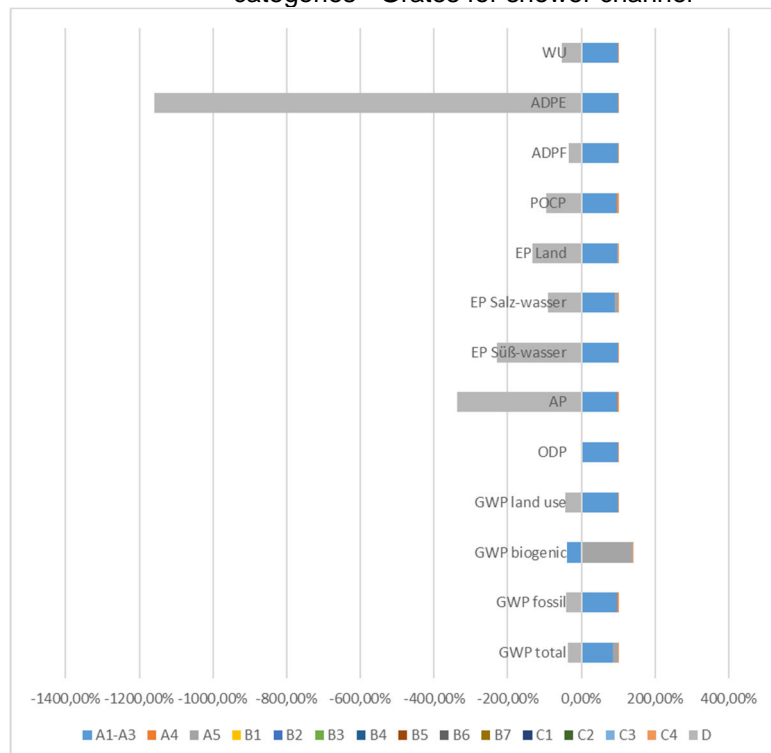


Illustration 17 Percentage of the modules in selected environmental impact indicators - Accessories

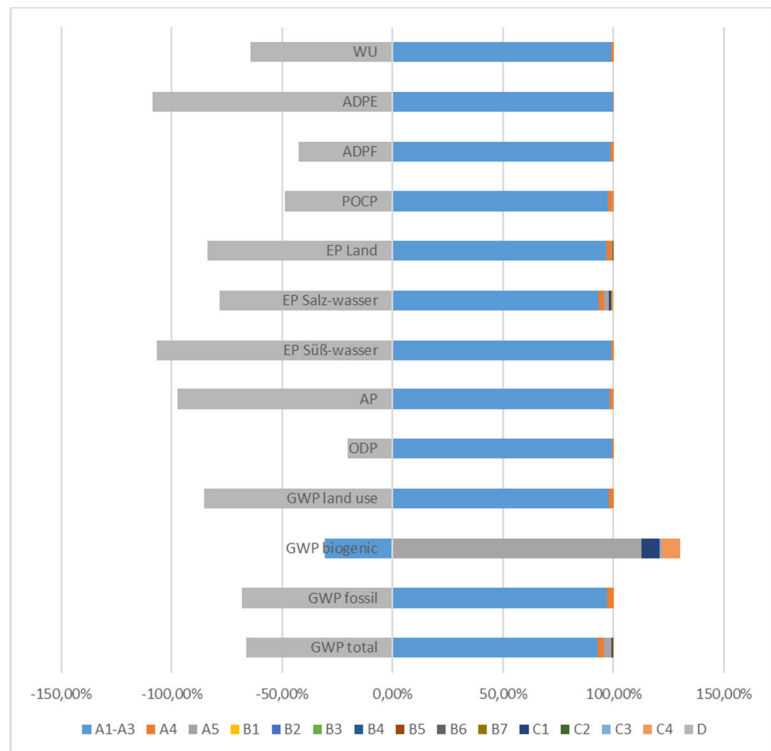


Illustration 18 Percentage of the modules in selected environmental impact categories - Drains for bathtubs and shower trays

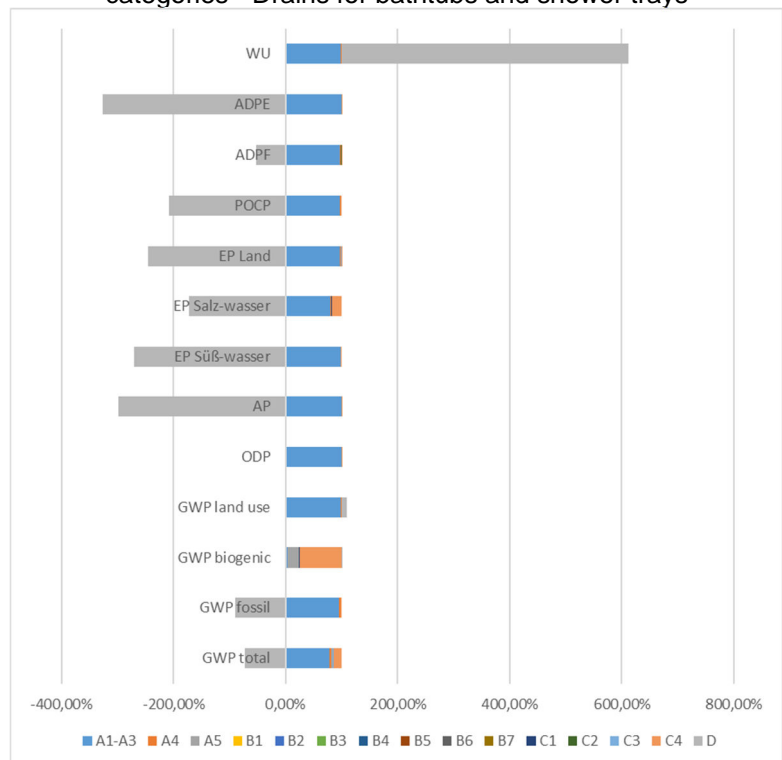


Illustration 19 Percentage of the modules in selected environmental impact indicators - Drains for sinks, spouts and appliances

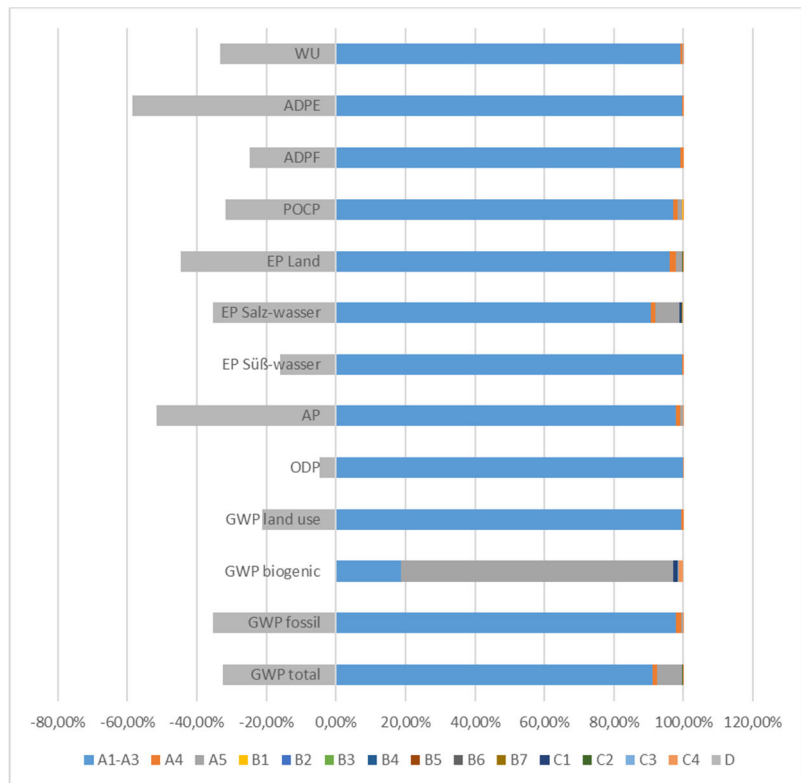


Illustration 20 Percentage of the modules in selected environmental impact categories - Drains for urinals

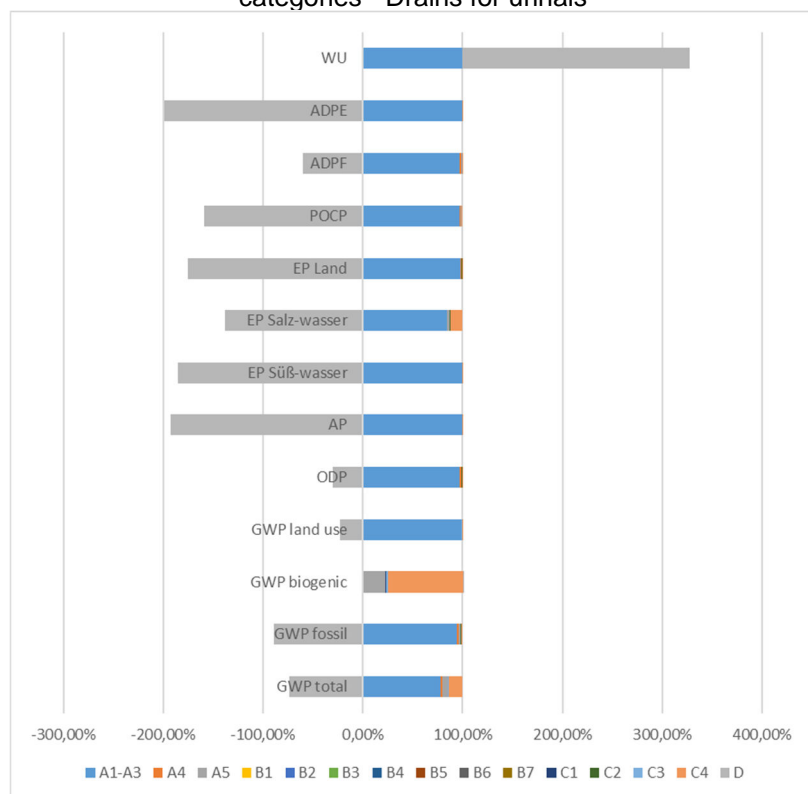


Illustration 21 Percentage of the modules in selected environmental impact categories - Drains for washbasins and bidets

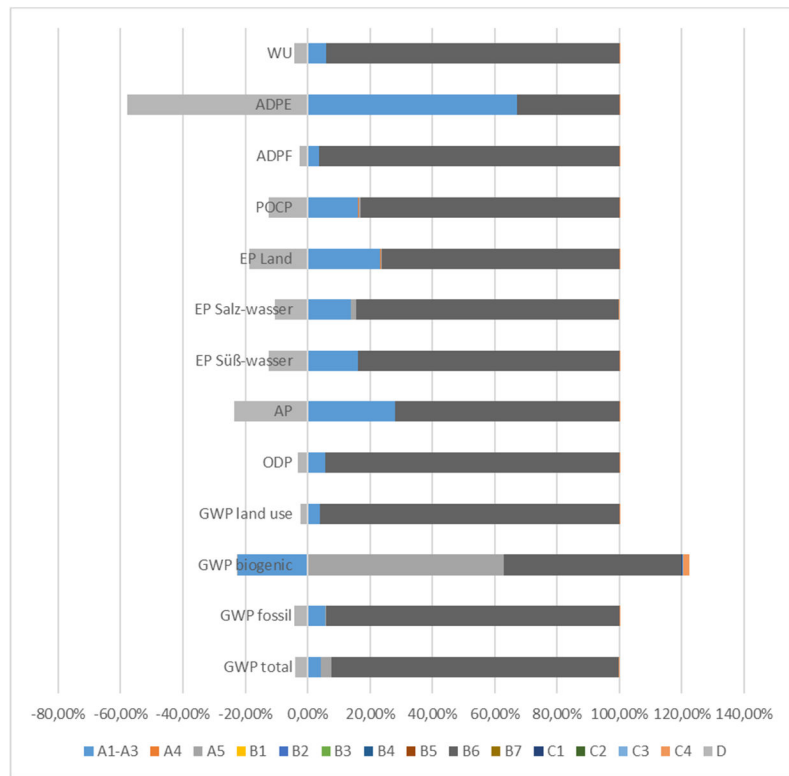


Illustration 22 Percentage of the modules in selected environmental impact categories - Electronic mixing unit

Report

The LCA report underlying this EPD was developed according to the requirements of DIN EN ISO 14040 and DIN EN ISO 14044 as well as DIN EN 15804 and DIN EN ISO 14025. It is deposited with ift Rosenheim. The results and conclusions reported to the target group are complete, correct, without bias and transparent. The results of the study are not designed to be used for comparative statements intended for publication.

Critical review

The critical review of the LCA and of the report took place in the course of verification of the EPD and was carried out by Prof. Dr. Eric Brehm, an external verifier.

7 General information regarding the EPD

Comparability

This EPD was prepared in accordance with DIN EN 15804 and is therefore only comparable to those EPDs that also comply with the requirements set out in DIN EN 15804.

Any comparison must refer to the building context and the same boundary conditions of the various life cycle stages.

For comparing EPDs of construction products, the rules set out in DIN EN 15804, Clause 5.3, apply.

The detailed individual results of the products were summarised on the basis of conservative assumptions and differ from the average results. Identification of the product groups and the resulting variations are documented in the background report.

Communication

The communications format of this EPD meets the requirements of EN 15942:2012 and is therefore the basis for B2B communication. Only the nomenclature has been changed according to DIN EN 15804.

Verification

Verification of the Environmental Product Declaration is documented in accordance with the "ift-Richtlinie zur Erstellung von Typ III Umweltproduktdeklarationen" (Guidance on preparing Type III Environmental Product Declarations) in accordance with the requirements set out in DIN EN ISO 14025.

This declaration is based on the PCR documents "PCR Part A" PCR-A-1.0:2023 and "Surface temperature control" PCR-FT-1.0:2023.

The European standard EN 15804 serves as the core PCR ^{a)}
Independent external verification of the Declaration and statement according to EN ISO 14025:2010
Independent third party verifier: ^{b)} Eric Brehm
^{a)} Product category rules ^{b)} Optional for business-to-business communication Mandatory for business-to-consumer communication (see EN ISO 14025:2010, 9.4)

Revisions of this document

No.	Date	Note	Person in charge	Verifier
1	21.02.2025	External Verification	Dumproff	Brehm
2	27.02.2025	Reference to VOC measurement added on page 6.	Dumproff	-
3	31.03.2026	Adaptation of Annex B	Hannemann	-

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9 Annex

Description of life cycle scenarios for Waste water systems

Product stage			Con- struction process stage		Use stage*							End-of-life stage				Benefits and loads beyond the system boundaries
A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Raw material supply	Transport	Manufacture	Transport	Construction/installation process	Use	Maintenance	Repair	Replacement	Modification/refurbishment	Operational energy use	Operational water use	Deconstruction/demolition	Transport	Waste processing	Disposal	Re-use Recovery Recycling potential
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

* For declared B-modules, the calculation of the results is performed taking into account the specified RSL related to one year

Table 16 Overview of applied life cycle stages

The scenarios were calculated taking into account the defined RSL (see Chapter 4 Use stage).

The scenarios were based on information provided by the manufacturer. The scenarios were furthermore based on the research project "EPDs for transparent building components. (1)

Note: The standard scenarios selected are presented in bold type. They were also used for calculating the indicators in the summary table.

- ✓ Included in the LCA
- Not included in the LCA



Product group: Drainage technology

A4 Transport

No.	Scenario	Description
A4.1	National	Transport mix 35-53% capacity used , approx. 600 km
A4.2	International/EU country	Transport mix 35-53% capacity used ¹ , approx. 2,000 km
A4.3	International/Non-EU	Transport mix 35-53% capacity used ¹ , approx. 19,000 km

¹ Capacity used: utilized loading capacity of the truck

The transport distances shown represent a transport average with the following transport mix. The scenarios include the return transport, if applicable.

Shipping method	Network fleet structure	Shares in %		
		A4.1	A4.2	A4.3
Parcel service provider (CEP - Courier-Express- Parcel service)	Van 7.5 – 16 t (Euro 6), diesel, 35% capacity used	2	0	0.5
Forwarding agency and own truck fleet	> 32 t truck/semitrailer (Euro 6), diesel, 53% capacity utilization	98	90	85
Air freights	Cargo and passenger aircrafts, kerosene	0	9	11
Seagoing vessels/containers	Seagoing/container vessels to receiving port, heavy oil	0	1	3.5

A4 Transport to the construction site	Transport weight [kg] per declared unit	Volume-capacity utilisation factor ²
PG1 - Backwater valves	6.783	<1
PG2 - Bathroom and balcony drains	2.077	
PG3 - Floor and cellar drains	3.826	
PG4 - Shower channels	4.438	
PG5 - Grates for shower channels	2.726	
PG6 - Accessories	2.279	
PG7 - Drains for bathtubs and shower trays	27.147	
PG8 - Drains for sinks, spouts and appliances	0.884	
PG9 - Drains for urinals	0.672	
PG10 - Drains for washbasins and bidets	3.504	
PG11 - Backwater valves	1.758	

² Volume utilization factor:

- = 1 Product fills the packaging completely (without air inclusion)
- < 1 Packaging contains unused volume (e.g. air, filling material)
- > 1 Product is packed in compressed form

A4 Transport to the construction site	Unit	A4.1	A4.2	A4.3
Core indicators				
GWP-t	kg CO ₂ eq.	6.27E-05	3.33E-04	2.81E-03
GWP-f	kg CO ₂ eq.	6.26E-05	3.33E-04	2.81E-03
GWP-b	kg CO ₂ eq.	2.18E-08	8.84E-08	7.09E-07
GWP-l	kg CO ₂ eq.	3.21E-08	1.06E-07	7.96E-07
ODP	kg CFC-11 eq.	1.06E-12	5.45E-12	4.58E-11
AP	mol H ⁺ eq.	1.71E-07	1.16E-06	1.03E-05
EP-fw	kg P eq.	5.24E-09	1.74E-08	1.31E-07
EP-m	kg N eq.	4.47E-08	3.98E-07	3.63E-06
EP-t	mol N eq.	2.45E-07	1.62E-06	1.42E-05
POCP	kg NMVOC-eq.	4.62E-07	4.21E-06	3.85E-05
ADPF	MJ	9.49E-04	4.78E-03	4.00E-02
ADPE	kg Sb eq.	1.81E-10	5.55E-10	4.09E-09
WDP	m ³ world eq. deprived	4.74E-06	1.66E-05	1.27E-04
Use of resources				
PERE	MJ	1.19E-05	4.13E-05	3.15E-04
PERM	MJ	0.00	0.00	0.00
PERT	MJ	1.19E-05	4.13E-05	3.15E-04
PENRE	MJ	9.49E-04	4.78E-03	4.00E-02
PENRM	MJ	0.00	0.00	0.00
PENRT	MJ	9.49E-04	4.78E-03	4.00E-02
SM	kg	3.98E-07	1.33E-06	1.00E-05
RSF	MJ	0.00	0.00	0.00
NRSF	MJ	0.00	0.00	0.00
FW	m ³	1.30E-07	4.63E-07	3.54E-06
Waste categories				
HWD	kg	6.96E-07	2.36E-06	1.78E-05
NHWD	kg	2.23E-05	7.40E-05	5.57E-04
RWD	kg	2.05E-10	7.39E-10	5.69E-09
Output material flows				
CRU	kg	0.00	0.00	0.00
MFR	kg	7.38E-09	2.84E-08	2.27E-07
MER	kg	4.16E-11	1.35E-10	1.02E-09
EE	MJ	1.68E-07	5.81E-07	4.41E-06
Additional environmental impact indicators				
PM	Disease incidence	6.08E-12	1.94E-11	1.43E-10
IRP	kBq U235 eq.	8.61E-07	3.15E-06	2.44E-05
ETP-fw	CTUe	5.01E-04	2.44E-03	2.02E-02
HTP-c	CTUh	2.78E-14	9.74E-14	7.45E-13
HTP-nc	CTUh	6.85E-13	3.61E-12	3.04E-11
SQP	dimensionless	9.33E-04	2.92E-03	2.12E-02

A5 Construction/installation process

No.	Scenario	Description
A5.1	Manual	According to the manufacturer the products are installed without additional lifting and auxiliary devices

In case of deviating consumption during installation/assembly of the products which forms part of the site management, they are covered at the building level.

For the most part, all systems are screwed on or plugged in. The installation does not result in any significant energy consumption. It is therefore not possible to make a quantitative statement.

The following quantities of waste materials are generated by packaging during installation:

Product group	Waste materials in kg	of which quantities collected for waste recycling (output materials) in kg
PG1 - Backwater valves	0.039	0
PG2 - Bathroom and balcony drains	0.387	0
PG3 - Floor and cellar drains	0.487	0
PG4 - Shower channels	2.275	0
PG5 - Grates for shower channels	1.007	0
PG6 - Accessories	0.363	0
PG7 - Drains for bathtubs and shower trays	0.681	0
PG8 - Drains for sinks, spouts and appliances	0.054	0
PG9 - Drains for urinals	0.066	0
PG10 - Drains for washbasins and bidets	0.211	0
PG11 - Backwater valves	2.277	0

Ancillary materials, consumables, use of water, use of other resources, material losses as well as direct emissions during installation are negligible.

It is assumed that the packaging material in the module construction / installation is sent to waste handling. Waste is only thermally recycled in line with the conservative approach. Benefits from A5 are specified in module D. Electricity replaces electricity mix (GLO, high voltage, market group); Thermal energy replaces thermal energy from natural gas (district or industrial, natural gas, RoW).

Transport to the recycling plants is included.

Since only one scenario is used, the results are shown in the relevant summary table.

B1 Use

It was conservatively assumed that all drainage technology product groups have contact with the indoor air. A VOC measurement was carried out on a representative mixed sample. [5]

The value was stored in Umberto and the results per unit for all product groups drainage technology are shown in the results under Chapter 6 for B1.

No.	Scenario	Description
B1	Normal intended use	<p>Release of substances into the indoor air.</p> <p>1.0 mg/m³ over 28 days; 13.04 mg/m³ per year corresponds to an annual emission of 1.304*10⁻⁵ kg TVOC</p>

Emissions to soil and water cannot be quantified. See EN 15804 Clause 5.4.4 and Clause 6.3.5.4.2. There are no horizontal standards with harmonized test methods.

Since this is a single scenario, the results are shown in the summary table. There, the results were related to one year, taking into account the reference service life.

B2 Cleaning, maintenance and repair (not relevant)

No cleaning or maintenance is required.

Ancillary materials, consumables, use of energy and water, material losses and waste as well as transport distances during cleaning are negligible.

Since only one scenario is used, the results are shown in the relevant summary table.

B3 Repair (not relevant)

No repair of the components of the building part is required.

For updated information refer to the respective instructions for assembly/installation, operation and maintenance from Viega GmbH & Co KG.

Ancillary materials, consumables, use of energy and water, waste, material losses and transport distances during repair are negligible.

Since only one scenario is used, the results are shown in the relevant summary table.

B4 Replacement (not relevant)

No.	Scenario	Description
B4	No replacement	According to the manufacturer, a replacement is not planned.

*Assumptions for evaluation of possible environmental impacts; statements made do not constitute any guaranty or warranty of performance.

The statements made in this EPD are only informative to allow evaluation at the building level.

It is assumed that no replacement will be necessary during the 50-year reference service life and the 50-year building service life.

For updated information refer to the respective instructions for assembly/installation, operation and maintenance from Viega GmbH & Co KG.

Ancillary materials, consumables, use of energy and water, material losses, waste as well as transport distances during replacement are negligible.

Since only one scenario is used, the results are shown in the relevant summary table.

B5 Modification/refurbishment (not relevant)

According to the manufacturer, the elements are not included in the improvement/modernisation activities for buildings.

For updated information refer to the respective instructions for assembly/installation, operation and maintenance from Viega GmbH & Co KG.

Ancillary materials, consumables, use of energy and water, material losses, waste as well as transport distances during replacement are negligible.

Since only one scenario is used, the results are shown in the relevant summary table.



B6 Operational energy use

No.	Scenario	Description
B6.1	No energy consumption	No energy consumed when used
B6.2	Energy consumption Normal use (backwater valves)	For the backwater valves, it was assumed that a Grundfix Plus Control has a power consumption of 5 W/h in standby mode, 12 W/h when in motion and 19 W/h when closed during backwater. The product runs a test once a day and, conservatively estimated, prevents a backflow 3 times a year. Therefore, an electricity consumption of 121 W/d is assumed, which results in 44.165 kWh/a
B6.3	Energy consumption Normal use (electronic mixing unit)	The power consumption of a Multiplex Trio E is assumed as the electronic mixing unit. This product has a maximum power consumption of 45 W and is in operation for a maximum of 15 minutes during the bathing process. With 60 bathing sessions per year, this results in an electricity consumption of 203.3 kWh/a

Energy consumption only occurs within the product groups 'backwater valves' and 'electronic mixing unit'. The 'worst case article' was identified and its energy consumption estimated for 1 year.

Since only one scenario is used, the results are shown for one year in the relevant summary table.

B7 Operational water use (not relevant)

No water consumption when used as intended. The water flow is not a component that determines the functionality of the products. Water consumption for cleaning is specified in module B2.1.

There is no transport consumption for water use in buildings. Ancillary materials, consumables, waste materials and other scenarios are negligible.

Since only one scenario is used, the results are shown in the relevant summary table.

C1 Deconstruction, demolition

No.	Scenario	Description
C1	Deconstruction	<p>As per manufacturer:</p> <p>99% deconstruction</p> <p>Further deconstruction rates are possible, give adequate reasons.</p>

No relevant inputs or outputs apply to the scenario selected. The energy consumed for deconstruction is negligible. Any arising consumption is marginal.

Since only one scenario is used, the results are shown in the relevant summary table.

In case of deviating consumption, the removal of the products forms part of the site management and is covered at the building level.

C2 Transport

No.	Scenario	Description
C2	Transport	<p>Transport to the collection point with >32 t truck (Euro 4), diesel, 29.96 t payload, 53% utilized, 50 km.</p>

Since only one scenario is used, the results are shown in the relevant summary table.

C3 Waste management

No.	Scenario	Description
C3	Current market situation	<p>Share for recirculation of materials:</p> <ul style="list-style-type: none"> • Stainless steel 98% in melt (UBA, 2017) • Remaining metals (SiBr, brass, gunmetal, nickel) 97% in melt (UBA, 2017) • Aluminium 95% in melt (GDA, 2018) • Plastics 60%, thermal recycling in waste incineration plant (Zukunft Bauen, 2017) • Plastics 40%, material recycling (Zukunft Bauen, 2017) • Electronics 87% mechanically recycled (based on waste electrical equipment, UBA, 2018) • Batteries / accumulators 84% (UBA, 2018) • Remainder to landfill

As the products are placed on the European market, the disposal scenario is based on average European data sets.

The table below describes the disposal processes and their percentage by mass/weight. The calculation is based on the above mentioned shares in percent related to the declared unit of the product system.

C3 Disposal	Unit	PG1	PG2	PG3	PG4	PG5	PG6	PG7	PG8	PG9	PG10	PG11
Collection process, collected separately	kg	6.33 E+00	1.57 E+00	1.54 E+00	3.39 E+00	2.34 E+00	1.58 E+00	2.69 E+01	1.23 E+00	4.55 E-01	1.83 E+00	1.74 E+00
Collection process, collected as mixed construction waste	kg	6.40 E-02	1.59 E-02	1.55 E-02	3.43 E-02	2.36 E-02	1.60 E-02	2.71 E-01	1.24 E-02	4.60 E-03	1.85 E-02	1.76 E-02
Recovery system, for re-use	kg	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	7.02 E-02	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00	0.00 E+00
Recovery system, for recycling	kg	3.35 E+00	7.11 E-01	6.87 E-01	1.70 E+00	0.00 E+00	9.47 E-01	1.10 E+01	3.04 E-01	1.83 E-01	5.66 E-01	1.48 E+00
Recovery system, for energy recovery	kg	2.85 E+00	8.59 E-01	7.29 E-01	1.68 E+00	2.27 E+00	6.22 E-01	1.58 E+01	1.11 E-01	2.72 E-01	4.81 E-02	1.79 E-01
Disposal	kg	7.64 E-01	4.12 E-03	1.19 E-01	1.24 E-02	0.00 E+00	1.30 E-02	9.15 E-02	8.15 E-01	6.53 E-05	1.22 E+00	3.77 E-01

Since this is a single scenario, the results are shown in the summary table.

C4 Disposal

No.	Scenario	Description
C4	Disposal	The non-measurable quantities and losses of the reuse/recycling chain (C1 and C3) are modelled as “inert waste (Europe without Switzerland, treatment of inert waste, sanitary landfill.”

The consumption in scenario C4 results from physical pre-treatment, waste recycling and management of the disposal site. The benefits obtained here from the substitution of primary material production are allocated to Module D, e.g. electricity and heat from waste incineration.

Since only one scenario is used, the results are shown in the relevant summary table.

D Benefits and loads from beyond the system boundaries

No.	Scenario	Description
D	Recycling potential	<p>Stainless steel scrap from A5 and C3 excluding the scrap used in A3 replaces 100% of chrome steel (RoW); Silicon bronze scrap from A5 and C3 excluding the scrap used in A3 replaces 100% of bronze (RoW); Gunmetal scrap from C3 excluding the scrap used in A3 replaces 100% of gunmetal; Brass scrap from C3 excluding the scrap used in A3 replaces 100% of brass; Aluminium scrap from C3 excluding the scrap used in A3 replaces 100% of aluminium, sheet metal rolls (RoW); Nickel scrap from C3 excluding the scrap used in A3 replaces 100% of nickel (GLO); Electronics scrap from C3 excluding the scrap used in A3 replaces 100% of electronic components (GLO); Plastic recyclate from C3 excluding the plastics used in A3 replaces 60% of polyethylene, high density, RoW; Battery scrap from C3 replaces 84% of battery cell, Li-ion, LFP (GLO) Benefits from incineration plant: Electricity replaces electricity mix (GLO); Thermal energy replaces thermal energy from natural gas (RoW).</p>

The values in module D result from recycling of the packaging material in module A5 and from deconstruction at the end of service life.

Since this is a single scenario, the results are shown in the summary table.

Annex B

As some products are OEM items, they are not listed in the overview but were taken into account when calculating the EPD results. The EPD therefore also covers the OEM items that are not explicitly shown.

Backwater valves

Material no.	Item no.	Model no.	System name	Material short text	Mass in g	Mass in kg	Dimensions	Conversion factor
492123	462963	4989	Optifix 3	4989 optifix 3 70x100 5 C 9	2786,50	2,787	70 X 100	0,4354
492733	489083	4992	Optifix 3	4992 height adjustment piece 340 5 C 9	642,00	0,642	340	0,1003
496743	310332	4987.3	Grundfix	49873 back pressure seal 150 5 C 9	5490,00	5,490	150	0,8578
497003	305376	4987.3	Grundfix	49873 back pressure seal 100 5 C 9	4080,00	4,080	100	0,6375
497013	305383	4987.3	Grundfix	49873 back pressure seal 125 5 C 9	4205,00	4,205	125	0,6570
497023	305390	4987.1	Grundfix	49871 back pressure seal 100 5 C 9	3703,00	3,703	100	0,5786
498673	469979	4992	Optifix 3	4992 height adjustment piece 150 5 C 9	437,00	0,437	150	0,0683
499743	310325	4987.2	Grundfix	49872 back pressure seal 150 5 C 9	5203,00	5,203	150	0,8130
499843	305567	4987.2	Grundfix	49872 back pressure seal 100 5 C 9	3850,00	3,850	100	0,6016
499933	305574	4987.2	Grundfix	49872 back pressure seal 125 5 C 9	3880,00	3,880	125	0,6063
527683	667788	4987.41	Grundfix Plus Control	498741 grundfix plus DN100 5 C 9	8870,00	8,870	DN100	1,3859
527693	667795	4987.41	Grundfix Plus Control	498741 grundfix plus DN125 5 C 9	8900,00	8,900	DN125	1,3906
527703	667801	4987.41	Grundfix Plus Control	498741 grundfix plus DN150 5 C 9	10050,00	10,050	DN150	1,5703
765112	607128	4995.1	Sperrfix	49951 sperrfix DN40 5 B 9	558,00	0,558	DN40	0,0872
765122	607135	4995.1	Sperrfix	49951 sperrfix DN50 5 B 9	599,00	0,599	DN50	0,0936
765132	607142	4995.2	Sperrfix	49952 sperrfix DN40 5 B 9	485,00	0,485	DN40	0,0758
765142	607159	4995.2	Sperrfix	49952 sperrfix DN50 5 B 9	439,00	0,439	DN50	0,0686
765152	607166	4995.3	Sperrfix	49953 sperrfix DN50 5 B 9	421,00	0,421	DN50	0,0658

Bathroom and balcony drains

Material no.	Item no.	Model no.	System name	Material short text	Mass in g	Mass in kg	Dimensions	Conversion factor
406083	626976	4944.21	Advantix	494421 base body 100 5 C 9	500,00	0,500	100	0,3145
406093	626983	4944.2	Advantix	49442 balcony/terrace waste 100 5 C 9	660,00	0,660	100	0,4151
406123	626990	4946.2	Advantix	49462 balcony/terrace waste 100 5 C 9	566,00	0,566	100	0,3560
471113	583217	4936.2	Advantix	49362 floor trap for bathroom DN505 429	605,00	0,605	DN50	0,3805
471123	583224	4936.3	Advantix	49363 floor trap for bathroom - 5 C 9	605,00	0,605	-	0,3805
471133	583231	4936.4	Advantix	49364 floor trap for bathroom - 5 C 9	744,00	0,744	-	0,4679
471143	583248	4936.2	Advantix	49362 floor trap for bathroom DN505 C 9	605,00	0,605	DN50	0,3805
471413	617271	4936.3	Advantix	49363 floor trap for bathroom DN505 C 9	620,00	0,620	DN50	0,3899
471423	617288	4936.4	Advantix	49364 floor trap for bathroom DN505 C 9	836,00	0,836	DN50	0,5258
471803	556884	4911.6	Advantix	49116 floor trap for bathroom 40x55 C 9	755,00	0,755	40 X 50	0,4748
472163	556907	4921.4	Advantix	49214 floor trap for bathroom 40x55 C 9	650,00	0,650	40 X 50	0,4088
472173	556914	4926	Advantix	4926 floor trap for bathroom 50 5 C 9	646,00	0,646	50	0,4063
472183	556921	4921.6	Advantix	49216 floor trap for bathroom 40x55 C 9	760,00	0,760	40 X 50	0,4780
472193	556938	4921.76	Advantix	492176 floor trap for bathroom DN505 C 9	700,00	0,700	DN 50	0,4403
472203	556945	4921.3	Advantix	49213 floor trap for bathroom DN505 C 9	516,00	0,516	DN50	0,3245
472213	557058	4927	Advantix	4927 waste combination 50/40x100 5 C 9	960,00	0,960	50/40 X 100	0,6038
472223	557065	4927.1	Advantix	49271 waste DN50 5 C 9	790,00	0,790	DN50	0,4969
472413	491642	4926.20	Advantix	492620 bath drain R 120 DN50 5 C 9	1130,00	1,130	DN50	0,7107
472453	470937	4926.5	Advantix	49265 base body 50 5 C 9	496,00	0,496	50	0,3119
472703	284619	4921.65	Advantix	492165 base body 40x50 5 C 9	570,00	0,570	40 X 50	0,3585
472713	284626	4921.66	Advantix	492166 base body 40x70 5 C 9	552,00	0,552	40 X 70	0,3472
472803	284657	4921.75	Advantix	492175 base body 70 5 C 9	500,00	0,500	70	0,3145
473423	557119	4935.1	Advantix	49351 floor trap for bathroom 40x55 C 9	550,00	0,550	40 X 50	0,3459
473433	557126	4935.3	Advantix	49353 floor trap for bathroom 40x55 C 9	555,00	0,555	40 X 50	0,3491
473443	557133	4935.9		49359 floor trap for bathroom 40x55 C 9	540,00	0,540	40 X 50	0,3396
473533	557157	4936		4936 floor trap for bathroom 50 5 C 9	922,00	0,922	50	0,5799
473543	557140	4935.2	Advantix	49352 floor trap for bathroom 40x55 C 9	711,00	0,711	40 X 50	0,4472
473913	565695	4938	Advantix	4938 floor trap for bathroom - 5 C 9	644,00	0,644	-	0,4050
473923	565701	4939	Advantix	4939 floor trap for bathroom - 5 C 9	820,00	0,820	-	0,5157
488503	571665	4938.1		49381 floor trap for bathroom 100 5 C 9	1750,00	1,750	100	1,1006
488513	571672	4938.1		49381 floor trap for bathroom 150 5 C 9	1970,00	1,970	150	1,2390

Material no.	Item no.	Model no.	System name	Material short text	Mass in g	Mass in kg	Dimensions	Conversion factor
488523	571689	4939.1		49391 floor trap for bathroom 100 5 C 9	1672,00	1,672	100	1,0516
488663	571719	4938.2		49382 floor trap for bathroom 100 5 C 9	2232,00	2,232	100	1,4038
490103	467395	4936.1		49361 floor trap for bathroom 50 5 C 9	742,00	0,742	50	0,4667
490963	485412	4935.6	Advantix	49356 base body 50 5 C 9	380,00	0,380	50	0,2390
493873	295929	4943.21	Advantix	494321 base body 50 5 C 9	450,00	0,450	50	0,2830
494063	295936	4944.21	Advantix	494421 base body 50 5 C 9	460,00	0,460	50	0,2893
494283	125936	4941.5	Advantix	49415 balcony/terrace waste 50 5 C 9	164,50	0,165	50	0,1035
494313	144319	4941.5	Advantix	49415 balcony/terrace waste 70 5 C 9	191,90	0,192	70	0,1207
494353	125158	4942.5	Advantix	49425 balcony/terrace waste 50 5 C 9	174,10	0,174	50	0,1095
494373	139490	4942.5	Advantix	49425 balcony/terrace waste 70 5 C 9	201,00	0,201	70	0,1264
494443	557072	4943.2	Advantix	49432 balcony/terrace waste 50 5 C 9	616,00	0,616	50	0,3874
494453	557089	4943.2	Advantix	49432 balcony/terrace waste 70 5 C 9	638,00	0,638	70	0,4013
494463	557096	4944.2	Advantix	49442 balcony/terrace waste 50 5 C 9	622,00	0,622	50	0,3912
494483	557102	4944.2	Advantix	49442 balcony/terrace waste 70 5 C 9	645,00	0,645	70	0,4057
494553	557263	4943.21	Advantix	494321 base body 70 5 C 9	480,00	0,480	70	0,3019
494583	557270	4944.21	Advantix	494421 base body 70 5 C 9	488,00	0,488	70	0,3069
494703	289379	4945.2	Advantix	49452 balcony/terrace waste 50 5 C 9	520,00	0,520	50	0,3270
494713	289386	4945.2	Advantix	49452 balcony/terrace waste 70 5 C 9	540,00	0,540	70	0,3396
494803	289393	4946.2	Advantix	49462 balcony/terrace waste 50 5 C 9	526,00	0,526	50	0,3308
494813	289409	4946.2	Advantix	49462 balcony/terrace waste 70 5 C 9	550,00	0,550	70	0,3459
566863	703226	4935.1PL		49351PLfloor trap for bathroom 40x55 C 9	550,00	0,550	40 X 50	0,3459
616921	586744	4970	Advantix	4970 rain water siphon DN100 5 A 9	543,00	0,543	DN 100	0,3415
631003	669195	4914.10	Advantix Top	491410 floor trap for bathroom DN505 C 9	878,00	0,878	DN50	0,5522
631013	669218	4914.11	Advantix Top	491411 floor drainage DN50 5 C 9	940,00	0,940	DN50	0,5912
631023	669201	4914.10	Advantix Top	491410 floor trap for bathroom DN505 C 9	895,00	0,895	DN50	0,5629
631033	669225	4914.11	Advantix Top	491411 floor drainage DN50 5 C 9	1094,00	1,094	DN50	0,6881
631043	669232	4914.2	Advantix Top	49142 base body DN50 5 C 9	1818,00	1,818	DN50	1,1434
631053	669249	4914.20	Advantix Top	491420 floor trap for bathroom DN505 C 9	1878,00	1,878	DN50	1,1811
631063	669263	4914.21	Advantix Top	491421 floor drainage DN50 5 C 9	2004,00	2,004	DN50	1,2604
631073	669256	4914.20	Advantix Top	491420 floor trap for bathroom DN505 C 9	1906,00	1,906	DN50	1,1987
631083	669270	4914.21	Advantix Top	491421 floor drainage DN50 5 C 9	2120,00	2,120	DN50	1,3333
632413	661762	4927.3	Advantix Top	49273 floor trap for bathroom DN505 C 9	776,00	0,776	DN50	0,4881
645833	687687	4980.63	Advantix	498063 floor trap for bathroom DN405 429	616,00	0,616	DN40/50	0,3874

Material no.	Item no.	Model no.	System name	Material short text	Mass in g	Mass in kg	Dimensions	Conversion factor
645843	687694	4980.60	Advantix	498060 floor trap for bathroom DN405 429	778,00	0,778	DN40/50	0,4893
645853	687700	4980.61	Advantix	498061 floor trap for bathroom DN405 Z 9	794,00	0,794	DN40/50	0,4994

Floor and cellar drains

Material no.	Item no.	Model no.	System name	Material short text	Mass in g	Mass in kg	Dimensions	Conversion factor
491263	491673	4923.5	Advantix	49235 pipe shielding - R120 DN50 5 C 9	673,00	0,673	DN50	0,4342
494723	557164	4955.1	Advantix	49551 floor drainage 70 5 C 9	1020,00	1,020	70	0,6581
494733	557171	4955.1	Advantix	49551 floor drainage 100 5 C 9	1140,00	1,140	100	0,7355
494743	557188	4951.1	Advantix	49511 floor drainage 50 5 C 9	1010,00	1,010	50	0,6516
494753	557195	4951.1	Advantix	49511 floor drainage 70 5 C 9	1050,00	1,050	70	0,6774
494763	557201	4951.1	Advantix	49511 floor drainage 100 5 C 9	1100,00	1,100	100	0,7097
495233	491659	4951.20	Advantix	495120 floor trap R - 120 DN50 5 C 9	1505,00	1,505	DN50	0,9710
495243	491666	4951.20	Advantix	495120 floor trap R - 120 DN70 5 C 9	1608,00	1,608	DN70	1,0374
496103	284947	4951.15	Advantix	495115 base body 50 5 C 9	645,00	0,645	50	0,4161
496113	284954	4951.15	Advantix	495115 base body 70 5 C 9	684,00	0,684	70	0,4413
496123	284961	4951.15	Advantix	495115 base body 100 5 C 9	760,00	0,760	100	0,4903
496211	106003	4956	Advantix	4956 waste for basement 100 5 A 9	720,00	0,720	100	0,4645
496473	285043	4955.15	Advantix	495515 base body 100 5 C 9	810,00	0,810	100	0,5226
496483	285050	4955.15	Advantix	495515 base body 70 5 C 9	720,00	0,720	70	0,4645
496533	289454	4955.25	Advantix	495525 base body 100 5 C 9	770,00	0,770	100	0,4968
496543	289461	4955.25	Advantix	495525 base body 70 5 C 9	644,00	0,644	70	0,4155
546033	660345	4937.1	Advantix	49371 plug in drain DN100 5 C 9	425,00	0,425	DN100	0,2742
546043	660758	4937.2	Advantix	49372 plug in drain DN100 5 C 9	375,00	0,375	DN100	0,2419
546053	663780	4937	Advantix	4937 plug in drain DN100 5 C 9	410,00	0,410	DN 100	0,2645

Shower channels

Material no.	Item no.	Model no.	System name	Material short text	Mass in g	Mass in kg	Dimensions	Conversion factor
416901	592363	4972.80	Advantix	497280 corner drain DN40/50 E 1 9	3348,00	3,348	DN 40/50	0,9761
418483	690397	4980.65	Advantix	498065 base body DN40/50 5S429	330,00	0,330	DN 40/50	0,0962
472031	794460	4981.10	Advantix Cleviva	498110 shower channel 800 E MT9	2988,00	2,988	800	0,8711
472041	794477	4981.10	Advantix Cleviva	498110 shower channel 1000 E MT9	3470,00	3,470	1000	1,0117
472051	794484	4981.10	Advantix Cleviva	498110 shower channel 1200 E MT9	3868,00	3,868	1200	1,1277
472251	794491	4981.11	Advantix Cleviva	498111 shower channel 800 E MT9	3218,00	3,218	800	0,9382
472261	794507	4981.11	Advantix Cleviva	498111 shower channel 1000 E MT9	3317,00	3,317	1000	0,9671
472291	794514	4981.11	Advantix Cleviva	498111 shower channel 1200 E MT9	3410,00	3,410	1200	0,9942
622522	627010	4972.82	Advantix	497282 corner drain DN40/50 E 2 9	3250,00	3,250	DN 40/50	0,9475
738763	704353	4965.20	Advantix Vario	496520 shower channel 300-1200 3 239	4050,00	4,050	300 - 1200	1,1808
738773	704360	4965.21		496521 shower channel 300-1200 3 3 9	4050,00	4,050	300 - 1200	1,1808
744611	721671	4966.10	Advantix Vario	496610 shower channel 300-1200 5 A 9	3182,00	3,182	300 - 1200	0,9277
744811	736552	4967.10	Advantix Vario	496710 shower channel 300-1200 5 A 9	4290,00	4,290	300 - 1200	1,2507
745401	736736	4968.10	Advantix Vario	496810 shower channel 300-1200 5 A 9	4135,00	4,135	300 - 1200	1,2055
745751	736965	4982.10	Advantix	498210 base body 750 E 1 9	2362,00	2,362	750	0,6886
745761	736972	4982.10	Advantix	498210 base body 800 E 1 9	2010,00	2,010	800	0,5860
745771	736989	4982.10	Advantix	498210 base body 900 E 1 9	2270,00	2,270	900	0,6618
745781	736996	4982.10	Advantix	498210 base body 1000 E 1 9	2525,00	2,525	1000	0,7362
745791	737009	4982.10	Advantix	498210 base body 1200 E 1 9	2775,00	2,775	1200	0,8090
745801	737016	4982.20	Advantix	498220 base body 750 E 1 9	2195,00	2,195	750	0,6399
745811	737023	4982.20	Advantix	498220 base body 800 E 1 9	2272,00	2,272	800	0,6624
745821	737030	4982.20	Advantix	498220 base body 900 E 1 9	3050,00	3,050	900	0,8892
745831	737047	4982.20	Advantix	498220 base body 1000 E 1 9	2750,00	2,750	1000	0,8017
745841	737054	4982.20	Advantix	498220 base body 1200 E 1 9	3130,00	3,130	1200	0,9125
746411	761967	4966.19		496619 shower channel 300-1200 5 A 9	2540,00	2,540	300 - 1200	0,7405
748101	763978	4982.75	Advantix	498275 shower channel 750 E 1 9	4540,00	4,540	750	1,3236
748111	763985	4982.75	Advantix	498275 shower channel 800 E 1 9	6200,00	6,200	800	1,8076
748121	763992	4982.75	Advantix	498275 shower channel 900 E 1 9	5050,00	5,050	900	1,4723
748131	764005	4982.76	Advantix	498276 shower channel 750 E 1 9	6105,00	6,105	750	1,7799
748141	764012	4982.76	Advantix	498276 shower channel 800 E 1 9	4820,00	4,820	800	1,4052
748151	764029	4982.76	Advantix	498276 shower channel 900 E 1 9	5050,00	5,050	900	1,4723

Material no.	Item no.	Model no.	System name	Material short text	Mass in g	Mass in kg	Dimensions	Conversion factor
755701	753153	4983.10	Advantix	498310 shower channel 750 E 1 9	4480,00	4,480	750	1,3061
755711	753160	4983.10	Advantix	498310 shower channel 800 E 1 9	4520,00	4,520	800	1,3178
755721	753177	4983.10	Advantix	498310 shower channel 900 E 1 9	4886,00	4,886	900	1,4245
755731	753184	4983.10	Advantix	498310 shower channel 1000 E 1 9	5120,00	5,120	1000	1,4927
755741	753191	4983.10	Advantix	498310 shower channel 1200 E 1 9	5780,00	5,780	1200	1,6851
756001	753207	4983.20	Advantix	498320 shower channel 750 E 1 9	4480,00	4,480	750	1,3061
756011	753214	4983.20	Advantix	498320 shower channel 800 E 1 9	4516,00	4,516	800	1,3166
756021	753221	4983.20	Advantix	498320 shower channel 900 E 1 9	4886,00	4,886	900	1,4245
756031	753238	4983.20	Advantix	498320 shower channel 1000 E 1 9	5123,00	5,123	1000	1,4936
756041	753245	4983.20	Advantix	498320 shower channel 1200 E 1 9	6040,00	6,040	1200	1,7609
757961	686277	4965.10	Advantix Vario	496510 Shower channel basic unit 305 A 9	3307,00	3,307	300 - 1200	0,9641

Material no.	Item no.	Model no.	System name	Material short text	Mass in g	Mass in kg	Dimensions	Conversion factor
416922	592387	4972.30	Advantix	497230 grate 300EA1 E 2 9	332,00	0,332	300 EA1	0,1407
416942	592400	4972.40	Advantix	497240 grate 300EA2 E 2 9	325,00	0,325	300 EA2	0,1377
470452	794095	4981.50	Advantix Cleviva	498150 inlet piece - E MT9	124,00	0,124	-	0,0525
470462	794101	4981.60	Advantix Cleviva	498160 inlet piece - E MT9	122,00	0,122	-	0,0517
470472	794118	4981.30	Advantix Cleviva	498130 Profil 800 E MT9	1514,00	1,514	800	0,6415
470482	794125	4981.31	Advantix Cleviva	498131 Profil 1000 E MT9	1842,00	1,842	1000	0,7805
470492	794132	4981.32	Advantix Cleviva	498132 Profil 1200 E MT9	2268,00	2,268	1200	0,9610
470502	794002	4981.50	Advantix Cleviva	498150 inlet piece - E 1P9	140,00	0,140	-	0,0593
470529	794026	4981.50	Advantix Cleviva	498150 inlet piece - E 9P9	142,00	0,142	-	0,0602
470549	794040	4981.50	Advantix Cleviva	498150 inlet piece - E 8P9	140,00	0,140	-	0,0593
470553	794156	4981.50	Advantix Cleviva	498150 inlet piece - E 6P9	138,00	0,138	-	0,0585
470562	794163	4981.60	Advantix Cleviva	498160 inlet piece - E 1P9	140,00	0,140	-	0,0593
470589	794187	4981.60	Advantix Cleviva	498160 inlet piece - E 9P9	142,00	0,142	-	0,0602
470609	794200	4981.60	Advantix Cleviva	498160 inlet piece - E 8P9	142,00	0,142	-	0,0602
470613	794217	4981.60	Advantix Cleviva	498160 inlet piece - E 6P9	138,00	0,138	-	0,0585
470622	794224	4981.30	Advantix Cleviva	498130 Profil 800 E 1P9	1614,00	1,614	800	0,6839
470649	794248	4981.30	Advantix Cleviva	498130 Profil 800 E 9P9	1610,00	1,610	800	0,6822
470669	794262	4981.30	Advantix Cleviva	498130 Profil 800 E 8P9	1614,00	1,614	800	0,6839
470673	794279	4981.30	Advantix Cleviva	498130 Profil 800 E 6P9	1612,00	1,612	800	0,6831
470732	794286	4981.31	Advantix Cleviva	498131 Profil 1000 E 1P9	1932,00	1,932	1000	0,8186
470759	794309	4981.31	Advantix Cleviva	498131 Profil 1000 E 9P9	1936,00	1,936	1000	0,8203
470779	794323	4981.31	Advantix Cleviva	498131 Profil 1000 E 8P9	1932,00	1,932	1000	0,8186
470783	794330	4981.31	Advantix Cleviva	498131 Profil 1000 E 6P9	1932,00	1,932	1000	0,8186
470792	794347	4981.32	Advantix Cleviva	498132 Profil 1200 E 1P9	2356,00	2,356	1200	0,9983
470819	794361	4981.32	Advantix Cleviva	498132 Profil 1200 E 9P9	2342,00	2,342	1200	0,9924
470839	794385	4981.32	Advantix Cleviva	498132 Profil 1200 E 8P9	2362,00	2,362	1200	1,0008
470843	794392	4981.32	Advantix Cleviva	498132 Profil 1200 E 6P9	2360,00	2,360	1200	1,0000
620972	605414	4974.10	Advantix	497410 grate 165x20EA3 E 2 9	235,00	0,235	165 X 20 EA3	0,0996
621062	605704	4974.20	Advantix	497420 grate 165x20 E 2 9	321,00	0,321	165 X 20	0,1360
744822	736569	4967.30	Advantix Vario	496730 standing grate 300-1200 E 2 9	657,00	0,657	300-1200	0,2784
744833	736576	4967.31	Advantix Vario	496731 standing grate 300-1200 E 3 9	730,00	0,730	300-1200	0,3093

Material no.	Item no.	Model no.	System name	Material short text	Mass in g	Mass in kg	Dimensions	Conversion factor
744841	736583	4967.32	Advantix Vario	496732 standing grate 300-1200 E A 9	743,00	0,743	300-1200	0,3148
744852	736590	4967.33	Advantix Vario	496733 standing grate 300-1200 E B 9	740,00	0,740	300-1200	0,3136
745381	745400	4982.96	Advantix	498296 accessory set - 5 A 9	445,00	0,445	-	0,1886
746251	737153	4982.50	Advantix	498250 grate VisignER10,750 E MT9	1220,00	1,220	VISIGN ER10, 750	0,5169
746261	737160	4982.50	Advantix	498250 grate VisignER10,800 E MT9	1280,00	1,280	VISIGN ER10, 800	0,5424
746271	737177	4982.50	Advantix	498250 grate VisignER10,900 E MT9	1345,00	1,345	VISIGN ER10, 900	0,5699
746281	737184	4982.50	Advantix	498250 grate VisignER10,1000 E MT9	1422,00	1,422	VISIGN ER10, 1000	0,6025
746291	737191	4982.50	Advantix	498250 grate VisignER10,1200 E MT9	1702,00	1,702	VISIGN ER10, 1200	0,7212
746301	737207	4982.51	Advantix	498251 grate VisignER10,750 E GD9	1250,00	1,250	VISIGN ER10, 750	0,5297
746311	737214	4982.51	Advantix	498251 grate VisignER10,800 E GD9	1280,00	1,280	VISIGN ER10, 800	0,5424
746321	737221	4982.51	Advantix	498251 grate VisignER10,900 E GD9	1367,00	1,367	VISIGN ER10, 900	0,5792
746331	737238	4982.51	Advantix	498251 grate VisignER10,1000 E GD9	1456,00	1,456	VISIGN ER10, 1000	0,6169
746341	737245	4982.51	Advantix	498251 grate VisignER10,1200 E GD9	1704,00	1,704	VISIGN ER10, 1200	0,7220
746551	737351	4982.70	Advantix	498270 grate VisignER13,750 E 1 9	1290,00	1,290	VISIGN ER13, 750	0,5466
746561	737368	4982.70	Advantix	498270 grate VisignER13,800 E 1 9	1320,00	1,320	VISIGN ER13, 800	0,5593
746571	737375	4982.70	Advantix	498270 grate VisignER13,900 E 1 9	1402,00	1,402	VISIGN ER13, 900	0,5941
746581	737382	4982.70	Advantix	498270 grate VisignER13,1000 E 1 9	1486,00	1,486	VISIGN ER13, 1000	0,6297
746591	737399	4982.70	Advantix	498270 grate VisignER13,1200 E 1 9	1775,00	1,775	VISIGN ER13, 1200	0,7521
747401	737405	4982.71	Advantix	498271 grate VisignER12,750 E 2 9	1230,00	1,230	VISIGN ER12, 750	0,5212
747411	737412	4982.71	Advantix	498271 grate VisignER12,800 E 2 9	1235,00	1,235	VISIGN ER12, 800	0,5233
747421	737429	4982.71	Advantix	498271 grate VisignER12,900 E 2 9	1310,00	1,310	VISIGN ER12, 900	0,5551

Material no.	Item no.	Model no.	System name	Material short text	Mass in g	Mass in kg	Dimensions	Conversion factor
747431	737436	4982.71	Advantix	498271 grate VisignER12,1000 E 2 9	1395,00	1,395	VISIGN ER12, 1000	0,5911
747441	737443	4982.71	Advantix	498271 grate VisignER12,1200 E 2 9	1685,00	1,685	VISIGN ER12, 1200	0,7140
757972	686284	4965.30	Advantix Vario	496530 standing grate VisignSR1-300E 239	745,00	0,745	VISIGNSR1-300-1200	0,3157
757983	686291	4965.31	Advantix Vario	496531 standing grate VisignSR2-300E 3 9	745,00	0,745	VISIGNSR2-300-1200	0,3157
762461	711856	4965.62	Advantix Vario	496562 standing grate SR3-200 E A 9	194,00	0,194	SR3-200	0,0822
762462	711863	4965.63	Advantix Vario	496563 standing grate SR4-200 E B 9	170,00	0,170	SR4-200	0,0720
762463	711849	4965.61	Advantix Vario	496561 standing grate SR2-200 E 3 9	186,00	0,186	SR2-200	0,0788
762464	711832	4965.60	Advantix Vario	496560 standing grate SR1-200 E 2 9	185,00	0,185	SR1-200	0,0784
762521	711870	4965.32	Advantix Vario	496532 standing grate SR3-300-1200 E A 9	735,00	0,735	SR3-300-1200	0,3114
762522	711887	4965.33	Advantix Vario	496533 standing grate SR4-300-1200 E B 9	735,00	0,735	SR4-300-1200	0,3114

Accessories

Material no.	Item no.	Model no.	System name	Material short text	Mass in g	Mass in kg	Dimensions	Conversion factor
406671	627065	4934.8	Advantix	49348 frame 100x100 E 1 9	119,00	0,119	100 X 100	0,0744
406681	627072	4922.9	Advantix	49229 frame 150x150 E 1 9	332,90	0,333	150 X 150	0,2081
470003	555177	4934.1	Advantix	49341 top 100x100 5 C 9	154,00	0,154	100 X 100	0,0963
470013	555184	4934.1	Advantix	49341 top 100x100 5 C 9	163,00	0,163	100 X 100	0,1019
470023	555191	4934.2	Advantix	49342 top 100x100 5 C 9	187,30	0,187	100 X 100	0,1171
470033	555207	4934.2	Advantix	49342 top 100x100 5 C 9	187,40	0,187	100 X 100	0,1171
470043	555214	4934.3	Advantix	49343 top 100x100 5 C 9	368,00	0,368	100 X 100	0,2300
470053	555221	4934.4	Advantix	49344 top 150x150 5 C 9	342,00	0,342	150 X 150	0,2138
470063	555238	4934.4	Advantix	49344 top 150x150 5 C 9	345,20	0,345	150 X 150	0,2158
470073	555245	4934.5	Advantix	49345 top 150x150 5 C 9	477,10	0,477	150 X 150	0,2982
470083	555450	4934.5	Advantix	49345 top 150x150 5 C 9	482,00	0,482	150 X 150	0,3013
470093	555467	4934.6	Advantix	49346 top 150x150 5 C 9	960,00	0,960	150 X 150	0,6000
470123	555498	4922.5	Advantix	49225 top 150x150 5 C 9	365,00	0,365	150 X 150	0,2281
470133	555504	4922.5	Advantix	49225 top 150x150 5 C 9	367,00	0,367	150 X 150	0,2294
470143	555511	4922.6	Advantix	49226 top 150x150 5 C 9	488,10	0,488	150 X 150	0,3051
470153	555528	4922.6	Advantix	49226 top 150x150 5 C 9	491,00	0,491	150 X 150	0,3069
470163	555535	4922.7	Advantix	49227 top 150x150 5 C 9	899,40	0,899	150 X 150	0,5621
470353	794897	4981.87		498187 tube DN40x43/50 5 8Z9	74,00	0,074	DN40 X 43/50	0,0463
470853	571115	4961.90		496190 Stacking element 100 5 C 9	415,00	0,415	100	0,2594
470903	794408	4981.80	Advantix Cleviva	498180 odor trap DN40/50 5 9 9	876,00	0,876	DN 40/50	0,5475
470913	794415	4981.81	Advantix Cleviva	498181 odor trap DN40/50 5 9 9	916,00	0,916	DN 40/50	0,5725
470953	797270	4981.90	Advantix Cleviva	498190 waste DN50 5 9 9	310,00	0,310	DN 50	0,1938
471153	583255	4936.6	Advantix	49366 odor trap - 5 C 9	108,00	0,108	-	0,0675
471163	583262	4944.8	Advantix	49448 lock against smell (complete5 C 9	41,00	0,041	-	0,0256
471933	110468	4919		4919 reducer 50x40 5 C 9	58,50	0,059	50 X 40	0,0366
472907	446086	4921.8	Advantix	49218 grate 100x100 5 7 9	65,00	0,065	100 X 100	0,0406
473003	471057	4925	Advantix	4925 Stacking element - 5 C 9	542,00	0,542	-	0,3388
473103	471064	4994	Advantix	4994 Stacking element - 5 C 9	774,00	0,774	-	0,4838
473301	534479	4933.1	Advantix	49331 grate 100x100 E 1 9	281,50	0,282	100 X 100	0,1759
473311	534486	4933.2	Advantix	49332 grate 143x143 E 1 9	654,00	0,654	143 X 143	0,4088
473321	554026	4933.3	Advantix	49333 grate 94x94x5 E 1 9	92,00	0,092	94 X 94 X 5	0,0575

Material no.	Item no.	Model no.	System name	Material short text	Mass in g	Mass in kg	Dimensions	Conversion factor
473331	554033	4933.3	Advantix	49333 grate 94x94x5V E 1 9	96,40	0,096	94 X 94 X 5 V	0,0603
473341	554040	4933.4	Advantix	49334 grate 143x143x5 E 1 9	238,00	0,238	143 X 143 X 5	0,1488
473353	534493	4912.2	Advantix	49122 top frame 150x150 5 C 9	100,00	0,100	150 X 150	0,0625
473403	534516	4922.2	Advantix	49222 top frame 100x100 5 C 9	77,50	0,078	100 X 100	0,0484
473413	534523	4922.4	Advantix	49224 top frame 150x150 5 C 9	132,60	0,133	150 X 150	0,0829
473551	554859	4933.4	Advantix	49334 grate 143x143x5V E 1 9	237,50	0,238	143X143X5 V	0,1484
473561	554866	4933.5	Advantix	49335 grate 143x143x5 E 1 9	246,00	0,246	143 X 143 X 5	0,1538
473861	560751	4933.6	Advantix	49336 grate 143x143 E 1 9	242,00	0,242	143 X 143	0,1513
473871	560768	4933.61	Advantix	493361 grate 143x143 E 1 9	635,00	0,635	143 X 143	0,3969
473881	560775	4933.7	Advantix	49337 top 150x150 3 1 9	492,00	0,492	150 X 150	0,3075
477881	648152	4934.31	Advantix	493431 top 100x100 E 1 9	470,00	0,470	100 X 100	0,2938
478071	648176	4933.11	Advantix	493311 countertop 100x100 E 1 9	360,00	0,360	100 X 100	0,2250
487171	633868	4946.3	Advantix	49463 inlet piece 100 5 1A9	34,30	0,034	100	0,0214
490251	488987	4949.1	Advantix	49491 top frame 100x100 3 1 9	104,00	0,104	100 X 100	0,0650
490261	488994	4949.1	Advantix	49491 top frame 150x150 3 1 9	227,40	0,227	150 X 150	0,1421
490661	489038	4949.3	Advantix	49493 top frame 150x150 3 1 9	261,00	0,261	150 X 150	0,1631
490851	489045	4994.1	Advantix	49941 Stacking element 150x150 E 1 9	1230,00	1,230	150 X 150	0,7688
491471	588342	4948.39	Advantix	494839 Sealing collar 100 6 A 9	862,00	0,862	100	0,5388
491481	588656	4948.39	Advantix	494839 Sealing collar 145 6 A 9	830,00	0,830	145	0,5188
492733	489083	4992	Optifix 3	4992 height adjustment piece 340 5 C 9	642,00	0,642	340	0,4013
494240	287924	4948.31	Advantix	494831 gasket set - 3 1 9	1156,00	1,156	-	0,7225
494473	111496	4947	Advantix	4947 height adjustment piece 100 5 C 9	110,50	0,111	100	0,0691
494563	144012	4945.1-356	Advantix	49451 sand catcher 100 5SA 9	71,25	0,071	100	0,0445
494630	287900	4948.21	Advantix	494821 clamping flange - 3 1 9	225,00	0,225	-	0,1406
494663	284817	4947.1	Advantix	49471 Stacking element - 5 C 9	450,00	0,450	-	0,2813
494851	492281	4928.1	Advantix	49281 grate Visign RS1 100x100 E 3 9	308,00	0,308	100 X 100	0,1925
494861	492298	4928.2	Advantix	49282 grate Visign RS2 100x100 E 3 9	300,00	0,300	100 X 100	0,1875
494871	492304	4928.3	Advantix	49283 grate Visign RS3 100x100 E 3 9	258,50	0,259	100 X 100	0,1616
494881	492311	4928.4	Advantix	49284 grate Visign RS4 100x100 E 3 9	271,00	0,271	100 X 100	0,1694
494901	492335	4929.2	Advantix	49292 grate Visign RS2 150x150 E MT9	700,00	0,700	150 X 150	0,4375
494911	492342	4929.3	Advantix	49293 grate Visign RS3 150x150 E MT9	597,00	0,597	150 X 150	0,3731
494921	492359	4929.4	Advantix	49294 grate Visign RS4 150x150 E MT9	689,00	0,689	150 X 150	0,4306
498382	140175	4997	Advantix	4997 connection piece . 70 5 C 9	75,61	0,076	70	0,0473

Material no.	Item no.	Model no.	System name	Material short text	Mass in g	Mass in kg	Dimensions	Conversion factor
498392	130268	4997	Advantix	4997 connection piece . 50 5 C 9	57,40	0,057	50	0,0359
498673	469979	4992	Optifix 3	4992 height adjustment piece 150 5 C 9	437,00	0,437	150	0,2731
498920	141714	4998.2	Advantix	49982 clamping flange 274 3 1 9	438,00	0,438	274	0,2738
498931	125530	4998.3	Advantix	49983 gasket set - 5 A 9	1265,00	1,265	-	0,7906
498983	112707	4996	Advantix	4996 height adjustment piece - 5 C 9	197,00	0,197	-	0,1231
499282	109523	4995.05-876		499505 unit flange pipe 40x250 5 B 9	136,00	0,136	40 X 250	0,0850
499803	285128	4996.1	Advantix	49961 Stacking element - 5 C 9	551,00	0,551	-	0,3444
559751	709112	4932.2	Advantix	49322 top 100 3 1 9	191,00	0,191	100	0,1194
559761	709129	4932.3	Advantix	49323 top 100 3 1 9	546,00	0,546	100	0,3413
617381	586423	4962.1	Advantix	49621 Grate Visign RS11 110 E 1 9	307,00	0,307	110	0,1919
617391	586430	4962.2	Advantix	49622 Grate Visign RS12 110 E 1 9	323,00	0,323	110	0,2019
617401	586447	4962.3	Advantix	49623 Grate Visign RS13 110 E 1 9	275,00	0,275	110	0,1719
617461	586416	4962	Advantix	4962 top frame 120 E 1 9	100,10	0,100	120	0,0626
620663	680626	4973.98		497398 elbow 45°p. DN50 5 C 9	96,50	0,097	DN 50	0,0603
621762	617127	4976.10	Advantix	497610 grate 100 E 6D9	255,00	0,255	100	0,1594
621771	617141	4976.11	Advantix	497611 grate 100 E A 9	250,00	0,250	100	0,1563
621802	617165	4976.30	Advantix	497630 grate 100 E 6D9	270,00	0,270	100	0,1688
621811	617189	4976.31	Advantix	497631 grate 100 E A 9	265,00	0,265	100	0,1656
632561	790448	4914.90	Advantix	491490 sound insulation 500x350x3 6 A 9	475,00	0,475	500 X 350 X 3	0,2969
632571	791650	4914.90	Advantix	491490 sound insulation 500x350x8 6 A 9	660,00	0,660	500 X 350 X 8	0,4125
744621	721688	4966.14	Advantix Vario	496614 connection piece 290x110 5 A 9	580,00	0,580	290 X 110	0,3625
744631	721695	4966.16	Advantix Vario	496616 locking piece 275x110 5 A 9	480,00	0,480	275 X 110	0,3000
744983	736613	4967.86	Advantix Vario	496786 accessory set 20 E 3 9	105,00	0,105	20	0,0656
744991	736620	4967.86	Advantix Vario	496786 accessory set 20 E A 9	105,00	0,105	20	0,0656
745002	736637	4967.86	Advantix Vario	496786 accessory set 20 E B 9	105,00	0,105	20	0,0656
745421	745356	4982.45	Advantix	498245 mounting frame 750 E 2 9	1116,00	1,116	750	0,6975
745431	745363	4982.45	Advantix	498245 mounting frame 800 E 1 9	1170,00	1,170	800	0,7313
745441	745370	4982.45	Advantix	498245 mounting frame 900 E 1 9	1220,00	1,220	900	0,7625
745451	745387	4982.45	Advantix	498245 mounting frame 1000 E 1 9	1258,00	1,258	1000	0,7863
745461	745394	4982.45	Advantix	498245 mounting frame 1200 E 1 9	1350,00	1,350	1200	0,8438
746001	736804	4982.30	Advantix	498230 mounting frame 750 E 1 9	1160,00	1,160	750	0,7250
746011	736811	4982.30	Advantix	498230 mounting frame 800 E 1 9	1184,00	1,184	800	0,7400
746021	736828	4982.30	Advantix	498230 mounting frame 900 E 1 9	1176,00	1,176	900	0,7350

Material no.	Item no.	Model no.	System name	Material short text	Mass in g	Mass in kg	Dimensions	Conversion factor
746031	736835	4982.30	Advantix	498230 mounting frame 1000 E 1 9	1420,00	1,420	1000	0,8875
746041	736842	4982.30	Advantix	498230 mounting frame 1200 E 1 9	1494,00	1,494	1200	0,9338
746421	761974	4982.84	Advantix Vario	498284 Profil - E 1 9	850,00	0,850	-	0,5313
748280	789107	4982.74		498274 adapter 40 5 Z 9	46,00	0,046	40	0,0288
748290	789114	4982.74		498274 adapter 50 5 Z 9	74,00	0,074	50	0,0463
749331	737573	4982.92	Advantix	498292 odor trap 90 5 A 9	350,00	0,350	90	0,2188
749341	737580	4982.93	Advantix	498293 odor trap 70 5 C 9	318,00	0,318	70	0,1988
749351	737597	4982.94	Advantix	498294 odor trap 50 5 429	344,00	0,344	50	0,2150
749453	756062	4982.86		498286 reducer 40/50 5 C 9	82,00	0,082	40/50	0,0513
749510	759155	4982.11		498211 adapter 43/40x69 5 C 9	24,00	0,024	43/40 X 69	0,0150
749790	766955	4982.83	Advantix	498283 waste 40 5 Z 9	96,00	0,096	40	0,0600
758323	827243	4965.98		496598 odor trap Vario 5 C 9	34,00	0,034	VARIO	0,0213
758333	827359	4966.98		496698 odor trap Advantix 5 C 9	24,00	0,024	ADVANTIX	0,0150
758503	769550	4965.79	Advantix Vario	496579 waste 80x50 5 C 9	68,00	0,068	80 X 50	0,0425
762231	708917	4965.12	Advantix Vario	496512 connection piece 200 5 A 9	226,00	0,226	200	0,1413
762241	708924	4965.14	Advantix Vario	496514 connection piece 290x110 5 A 9	670,00	0,670	290 X 110	0,4188
762251	708931	4965.16	Advantix Vario	496516 locking piece 275x110 5 A 9	510,00	0,510	275 X 110	0,3188
762401	711771	4965.51	Advantix Vario	496551 Prefabricated set - E A 9	67,00	0,067	-	0,0419
762402	711764	4965.51	Advantix Vario	496551 Prefabricated set - E B 9	80,00	0,080	-	0,0500
762403	711757	4965.51	Advantix Vario	496551 Prefabricated set - E 3 9	78,00	0,078	-	0,0488
762404	711788	4965.51	Advantix Vario	496551 Prefabricated set - E 2 9	75,00	0,075	-	0,0469
762451	711818	4965.50	Advantix Vario	496550 accessory set - E A 9	75,00	0,075	-	0,0469
762452	711825	4965.50	Advantix Vario	496550 accessory set - E B 9	73,00	0,073	-	0,0456
762453	711801	4965.50	Advantix Vario	496550 accessory set - E 3 9	76,00	0,076	-	0,0475
762454	711795	4965.50	Advantix Vario	496550 accessory set - E 2 9	74,00	0,074	-	0,0463
762881	711894	4965.40	Advantix Vario	496540 accessory set - 5 A 9	49,00	0,049	-	0,0306
762891	711900	4965.44	Advantix Vario	496544 accessory set - 5 A 9	45,00	0,045	-	0,0281
762951	713072	4965.86	Advantix Vario	496586 accessory set - E A 9	71,00	0,071	-	0,0444
762962	713089	4965.86	Advantix Vario	496586 accessory set - E B 9	60,00	0,060	-	0,0375

Drains for bathtubs and shower trays

Material no.	Item no.	Model no.	System name	Material short text	Mass in g	Mass in kg	Dimensions	Conversion factor
527057	446109	5413.0		54130 dome 63 5 7 9	14,00	0,014	63	0,0005
527367	680701	5439.5		54395 universal valve Visign V1 110 7 9	283,00	0,283	1 1/4 X 63	0,0105
528087	765460	5420.21		542021 equipment set 70 5 7 9	33,00	0,033	70	0,0012
544532	120603	5693		5693 closure flange 32 5 B 9	29,30	0,029	32	0,0011
544537	112547	5693		5693 closure flange 32 5 7 9	48,30	0,048	32	0,0018
566772	703127	6387.35PL		638735PWaste and overflow comb. 11/5 B 9	364,00	0,364	1 1/2 X 40/50	0,0135
566872	703233	6822.4PL		68224PLodor trap 11/2x40/50 5 B 9	240,00	0,240	1 1/2 X 40/50	0,0089
566897	703257	6928PL		6928PL domoplex 75x40/50 5 7 9	280,00	0,280	75 X 40/50	0,0104
566957	703325	6163.1PL		61631PLworking component 40/50 0 7 9	716,00	0,716	40/50	0,0265
566967	703332	6162.0PL		61620PLMultiplex Set Visign M1 - 5 7 9	160,00	0,160	-	0,0059
600723	575410	6161.91		616191 supply socket VisignM2 5 7 9	30,00	0,030	VISIGN M2	0,0011
600747	575427	6161.92		616192 Rotatable rosette VisignMT2/5 7 9	37,50	0,038	VISIGN MT2/RT2	0,0014
600897	585334	6977.9		69779 dome 72 0 7 9	131,00	0,131	72	0,0048
601167	280949	6162.02		616202 Rotatable rosette VisignM1/R5 7 9	35,00	0,035	VISIGN M1/R1	0,0013
601467	306847	6161.05	Multiplex Trio	616105 MultiplexTrioSetVisignMT1 - 5 7 9	149,00	0,149	-	0,0055
601687	333287	6161.04		616104 supply socket 80x28 5 7 9	30,50	0,031	80 X 28	0,0011
601787	309664	6161.03		616103 Rotatable rosette VisignMT1/5 7 9	39,00	0,039	VISIGN MT1 / RT1	0,0014
602007	107222	6161.0	Multiplex Trio	61610 multiset trio - 5 7 9	392,00	0,392	-	0,0145
602407	309183	6161.216		6161216multiplex trio 11/2x40 0 7 9	1034,00	1,034	1 1/2 X 40	0,0382
602497	103378	6162.0	Multiplex	61620 Multiplex Set Visign M1 - 5 7 9	130,00	0,130	-	0,0048
602647	103071	6162.1	Multiplex	61621 multiplex working comp. 40/50 7 9	684,00	0,684	40/50	0,0253
603367	260668	6162.175		6162175multiplex working comp. 40 0 7 9	675,00	0,675	40	0,0250
604117	280956	6161.02		616102 rosette - 5 7 9	45,00	0,045	-	0,0017
604607	111557	6161.2		61612 multiplex trio 40/50 0 7 9	1215,00	1,215	40/50	0,0449
605152	138561	6163.45	Multiplex	616345 multiplex 40/50 0 7 9	837,00	0,837	40/50	0,0309
605372	101909	6162.45	Multiplex	616245 multiplex 40/50 0 7 9	788,00	0,788	40/50	0,0291
605427	111069	6163.1	Multiplex	61631 working component 40/50 5 B 9	728,00	0,728	40/50	0,0269
605452	114893	6162	Multiplex	6162 multiplex 11/2 0 7 9	648,00	0,648	1 1/2	0,0240
605462	152079	6163	Multiplex	6163 multiplex 11/2 0 7 9	704,00	0,704	1 1/2	0,0260
605477	308889	6163.2	Multiplex	61632 multiplex working comp. 40/50 7 9	850,00	0,850	40/50/1070	0,0314

Material no.	Item no.	Model no.	System name	Material short text	Mass in g	Mass in kg	Dimensions	Conversion factor
605962	110031	6162.875		6162875multiplex 40 0 7 9	748,00	0,748	40	0,0277
605994	312213	6161.99		616199 conversion kit - 0 4 9	367,00	0,367	-	0,0136
606267	364182	6163.875		6163875multiplex 40 0 7 9	765,00	0,765	40	0,0283
606417	572853	6177.45		617745 citaplex 40/50 5 7 9	715,00	0,715	40/50	0,0264
606427	572860	6977	Varioplex	6977 varioplex 40/50 0 7 9	400,00	0,400	40/50	0,0148
606611	273583	6161.86		616186 connection unit set - 0 1 9	1406,00	1,406	-	0,0520
607007	495121	6168.4PL		61684PLsimplex 40/50 5 7 9	565,00	0,565	40/50	0,0209
607067	734602	6162.12		616212 Rotatable rosette VisignM5/R5 7 9	33,00	0,033	VISIGN M5/R5	0,0012
607102	106447	6168		6168 simplex 40 5 7 9	523,00	0,523	40	0,0193
607137	734633	6161.169		6161169equipment set VisignMT5/RT5 5 7 9	40,00	0,040	VISIGN MT5/RT5	0,0015
607147	734640	6161.179		6161179rosette 75 5 7 9	46,00	0,046	75	0,0017
607157	215392	6168-035		6168035valve cone - 5 7 9	68,20	0,068	-	0,0025
607197	734770	6171.08		617108 Rotatable rosette VisignM9/M5 7 9	44,60	0,045	VISIGN M9/MT9	0,0016
607381	274528	6161.81		616181 UP-pipe interruptor 3/4 0 1 9	510,00	0,510	3/4	0,0189
607567	285357	6168.45	Simplex	616845 simplex 40/50 5 7 9	568,00	0,568	40/50	0,0210
608107	133825	6168.2		61682 simplex 11/2 5 7 9	425,00	0,425	1 1/2	0,0157
608207	490690	6161.89		616189 Equipment Set VisignRU2 - 5 7 9	55,00	0,055	-	0,0020
608262	800369	6161.89		616189 Equipment Set VisignRU2 - 5 DW9	37,00	0,037	-	0,0014
608383	354916	6178		6178 Waste and overflow comb. 11/3 3 9	418,00	0,418	1 1/2	0,0155
608432	111564	6176	Citaplex	6176 citaplex 11/2 3 3 9	314,00	0,314	1 1/2	0,0116
608442	105563	6176.24	Citaplex	617624 citaplex 40/50 3 3 9	466,00	0,466	40/50	0,0172
608452	101947	6176.45	Citaplex	617645 citaplex 40/50 3 3 9	463,00	0,463	40/50	0,0171
608653	109240	6176.241		6176241citaplex 40 3 3 9	540,00	0,540	40	0,0200
609057	721244	6162.01	Multiplex	616201 MULTIPLEX-SET M5 5 7 9	163,50	0,164	M5	0,0060
609067	721558	6142.01	Rotaplex	614201 ROTAPLEX-SET R5 5 7 9	88,00	0,088	R5	0,0033
609082	735883	6162.01	Multiplex	616201 MULTIPLEX-SET M5 5 DW9	102,60	0,103	M5	0,0038
609091	735890	6162.01	Multiplex	616201 MULTIPLEX-SET M5 5 LG9	108,00	0,108	M5	0,0040
609111	735906	6162.01	Multiplex	616201 MULTIPLEX-SET M5 5 1G9	110,00	0,110	M5	0,0041
609191	806118	6162.01	Multiplex	616201 MULTIPLEX-SET M5 5 1K9	122,00	0,122	M5	0,0045
609201	806125	6161.01	Multiplex Trio	616101 MULTIPLEX TRIO-SET MT5 5 1K9	140,00	0,140	MT5	0,0052
611257	657406	6168.02		616802 rosette - 5 7 9	30,00	0,030	-	0,0011
611702	725778	6161.52	Multiplex Trio	616152 multiplex trio work.comp. 565 B 9	931,00	0,931	560 X 40/50	0,0344

Material no.	Item no.	Model no.	System name	Material short text	Mass in g	Mass in kg	Dimensions	Conversion factor
612007	725785	6161.01	Multiplex Trio	616101 MULTIPLEX TRIO-SET MT5 5 7 9	175,00	0,175	MT5	0,0065
612014	725815	6161.01	Multiplex Trio	616101 MULTIPLEX TRIO-SET MT5 5 DW9	120,00	0,120	MT5	0,0044
612031	732486	6161.01	Multiplex Trio	616101 MULTIPLEX TRIO-SET MT5 5 1G9	120,00	0,120	MT5	0,0044
612046	732493	6161.01	Multiplex Trio	616101 MULTIPLEX TRIO-SET MT5 5 6A9	125,00	0,125	MT5	0,0046
612111	732509	6161.01	Multiplex Trio	616101 MULTIPLEX TRIO-SET MT5 5 LG9	131,00	0,131	MT5	0,0048
612207	725792	6161.13	Multiplex Trio	616113 MULTIPLEX TRIO-SET MT3 5 7 9	129,00	0,129	MT3	0,0048
612214	725822	6161.13	Multiplex Trio	616113 MULTIPLEX TRIO-SET MT3 5 DW9	114,60	0,115	MT3	0,0042
612502	732523	6141.01	Rotaplex Trio	614101 ROTAPLEX TRIO-SET RT5 5 DW9	84,00	0,084	RT5	0,0031
612517	732530	6141.01	Rotaplex Trio	614101 ROTAPLEX TRIO-SET RT5 5 7 9	97,50	0,098	RT5	0,0036
612521	732547	6141.01	Rotaplex Trio	614101 ROTAPLEX TRIO-SET RT5 5 LG9	91,00	0,091	RT5	0,0034
612797	554118	6162.07		616207 Rotatable rosette VisignM2/R5 7 9	33,30	0,033	VISIGN M2/R2	0,0012
612897	727758	6161.70	Multiplex Trio	616170 multiplex trio 1070x40/50 5 7 9	1200,00	1,200	1070 X 40/50	0,0444
612907	727703	6161.51	Multiplex Trio	616151 multiplex trio 560x40/50 5 7 9	1125,00	1,125	560 X 40/50	0,0416
612917	727710	6161.61	Multiplex Trio	616161 multiplex trio 725x40/50 5 7 9	1150,00	1,150	725 X 40/50	0,0425
612927	727727	6161.71	Multiplex Trio	616171 multiplex trio 1070x40/50 5 7 9	1265,00	1,265	1070 X 40/50	0,0468
612937	727734	6161.50	Multiplex Trio	616150 multiplex trio 560x40/50 5 7 9	1050,00	1,050	560 X 40/50	0,0388
612947	727741	6161.60	Multiplex Trio	616160 multiplex trio 725x40/50 5 7 9	1063,00	1,063	725 X 40/50	0,0393
613107	727666	6141.61	Rotaplex Trio	614161 Rotaplex Trio 725x40/50 5 7 9	1115,00	1,115	725 X 40/50	0,0412
613142	488659	6142.32	Rotaplex	614232 rotaplex operation unit 40/55 B 9	902,00	0,902	40 / 50	0,0333
613177	754327	6142.42		614242 rotaplex R5-725x40/50 5 7 9	820,00	0,820	R5-725 X 40 / 50	0,0303
613502	574956	6142.33	Rotaplex	614233 rotaplex operation unit 40/55 B 9	860,00	0,860	40 / 50	0,0318
613537	734107	6141.02	Rotaplex Trio	614102 ROTAPLEX TRIO-SET RT3 5 7 9	99,20	0,099	RT3	0,0037
613557	727680	6141.60	Rotaplex Trio	614160 Rotaplex Trio 725x40/50 5 7 9	1270,00	1,270	725 X 40/50	0,0470
613567	727697	6141.70	Rotaplex Trio	614170 Rotaplex Trio 1070x40/50 5 7 9	1267,00	1,267	1070 X 40/50	0,0468
613857	632250	6154.09		615409 Rotatable rosette VisignM3 5 7 9	65,00	0,065	VISIGN M3	0,0024
613867	632267	6155.09		615509 rosette VisignM4 5 7 9	115,00	0,115	VISIGN M4	0,0043
613877	632274	6161.109		6161109Rotatable rosette VisignMT3/5 7 9	40,00	0,040	VISIGN MT3/RT3	0,0015
613887	632281	6161.159		6161159Rotatable rosette VisignMT4/5 7 9	44,00	0,044	VISIGN MT4/RT4	0,0016

Material no.	Item no.	Model no.	System name	Material short text	Mass in g	Mass in kg	Dimensions	Conversion factor
613897	632298	6161.108		6161108supply socket MT3+MT4Visign 5 7 9	13,00	0,013	MT3 + MT4 VISIGN	0,0005
613917	595678	6168.46		616846 simplex 40/50x725 5 7 9	575,00	0,575	40/50 X 725	0,0213
613927	595685	6168.21		616821 simplex 11/2x725 5 7 9	445,00	0,445	1 1/2 X 725	0,0165
613943	632311	6161.106		6161106sealing set VisignMT3+MT4 5 C 9	27,00	0,027	VISIGN MT3 + MT4	0,0010
614022	727949	6141.62	Rotaplex Trio	614162 rotaplex trio operation unit5 B 9	1215,00	1,215	725 X 40/50	0,0449
614032	727956	6141.72	Rotaplex Trio	614172 rotaplex trio operation unit5 B 9	1184,00	1,184	1070 X 40/50	0,0438
614417	727970	6161.62	Multiplex Trio	616162 multiplex trio work.comp. 725 7 9	960,00	0,960	725 X 40/50	0,0355
614427	727987	6161.72	Multiplex Trio	616172 multiplex trio work.comp. 105 7 9	1082,00	1,082	1070 X 40/50	0,0400
614557	728007	6166.41		616641 Simplex Trio 560x40/50 5 7 9	960,00	0,960	560 X 40/50	0,0355
614567	728014	6166.42		616642 Simplex Trio 725x40/50 5 7 9	975,00	0,975	725 X 40/50	0,0360
615097	785598	6149.5AA		61495AAmultiplex trio 725x11/2 5 7 9	655,00	0,655	725 X 1 1/2	0,0242
615117	785604	6163.5AA		61635AAmultiplex 1070x11/2 5 7 9	872,00	0,872	1070 X 1 1/2	0,0322
615147	785611	6163.6AA		61636AAmultiplex 725x11/2 5 7 9	750,00	0,750	725 X 1 1/2	0,0277
615487	728106	6161.321		6161321multiplex trio 725x11/2 0 7 9	2285,00	2,285	725 X 1 1/2	0,0845
615527	731618	6175.1	Multiplex Trio	61751 multiplex trio 40/50 5 7 9	1055,00	1,055	40/50	0,0390
615537	731625	6175.2	Rotaplex Trio	61752 Rotaplex Trio 40/50 5 7 9	1064,00	1,064	40/50	0,0393
615622	575397	6142.90		614290 valve cone 64 5 C 9	18,60	0,019	64	0,0007
616107	576325	6154.0	Multiplex	61540 MULTIPLEX-SET M3 5 7 9	115,00	0,115	M3	0,0043
616122	735913	6154.0	Multiplex	61540 MULTIPLEX-SET M3 5 DW9	110,00	0,110	M3	0,0041
616597	586508	6156.0	Rotaplex	61560 ROTAPLEX-SET R3 5 7 9	110,00	0,110	R3	0,0041
616601	799984	6142.01	Rotaplex	614201 ROTAPLEX-SET R5 5 1K9	158,00	0,158	R5	0,0058
616611	799991	6141.01	Rotaplex Trio	614101 ROTAPLEX TRIO-SET RT5 5 1K9	116,00	0,116	RT5	0,0043
618167	750008	6148.02		614802 dome 75 5 7 9	19,60	0,020	75	0,0007
618187	750015	6148.03		614803 dome 75 5 7 9	20,90	0,021	75	0,0008
620487	683566	6145.390	Multiplex Trio F	6145390dome 74xM8 0 7 9	139,00	0,139	74 X M8	0,0051
621407	801786	6965	Tempoplex	6965 Tempoplex 115x40/50 5 7 9	330,00	0,330	115 X 40/50	0,0122
621413	801793	6965.1	Tempoplex	69651 tempoplex working comp. 115x5 499	286,00	0,286	115 X 40/50	0,0106
623782	106812	6387		6387 Waste and overflow comb. 11/5 B 9	390,00	0,390	1 1/2 X 40	0,0144
624177	672027	6145.4	Multiplex Trio F	61454 Multiplex Trio F 560x40/50 5 7 9	1598,00	1,598	560 X 40/50	0,0591
631682	121617	6311K		6311K Waste and overflow comb. 11/5 B 9	262,00	0,262	1 1/2	0,0097
632083	124052	6311		6311 Waste and overflow comb. 11/3 3 9	376,00	0,376	1 1/2	0,0139

Material no.	Item no.	Model no.	System name	Material short text	Mass in g	Mass in kg	Dimensions	Conversion factor
633057	606565	6168.5		61685 simplex 11/2x40 5 7 9	480,00	0,480	1 1/2 X 40	0,0177
640092	132880	6387.38		638738 Waste and overflow comb. 11/5 B 9	324,00	0,324	1 1/2 X 40	0,0120
640102	311537	6387.35		638735 Waste and overflow comb. 11/5 B 9	365,00	0,365	1 1/2 X 40/50	0,0135
646377	695941	6142.92		614292 dome 115 5 7 9	42,10	0,042	115	0,0016
677227	723347	6170.10	Multiplex Trio	617010 multiplex trio MT9-560x40/505 7 9	1050,00	1,050	MT9-560 X 40/50	0,0388
677231	724559	6170.10	Multiplex Trio	617010 multiplex trio MT9-560x40/505 LG9	1060,00	1,060	MT9-560 X 40/50	0,0392
677247	724566	6171.10	Multiplex	617110 multiplex M9-560x40/50 5 7 9	945,00	0,945	M9-560 X 40/50	0,0349
677267	724580	6170.0	Multiplex Trio	61700 MULTIPLEX TRIO-SET MT9 5 7 9	295,00	0,295	MT9	0,0109
677277	724597	6171.0	Multiplex	61710 MULTIPLEX-SET M9 5 7 9	270,00	0,270	M9	0,0100
678527	733582	6171.11	Multiplex	617111 multiplex M9-725x40/50 5 7 9	945,00	0,945	M9-725X40/50	0,0349
678537	733599	6171.12	Multiplex	617112 multiplex M9-1070x40/50 5 7 9	1085,00	1,085	M9-1070X40/50	0,0401
678547	733605	6170.11	Multiplex Trio	617011 multiplex trio MT9-725x40/505 7 9	1106,00	1,106	MT9-725X40/50	0,0409
678557	733612	6170.12	Multiplex Trio	617012 multiplex trio MT9-1070x40/55 7 9	1054,00	1,054	MT9-1070X40/50	0,0390
684372	312121	6821.45		682145 odor trap 11/2x40/50 5 B 9	238,00	0,238	1 1/2 X 40/50	0,0088
684382	312138	6822.45		682245 odor trap 11/2x40/50 5 B 9	245,00	0,245	1 1/2 X 40/50	0,0091
689147	634100	6963	Tempoplex	6963 Tempoplex 115x40/50 5 7 9	383,00	0,383	115 X 40/50	0,0142
689152	634117	6963.1	Tempoplex	69631 tempoplex working comp. 40/55 B 9	340,00	0,340	40/50 X 60	0,0126
689497	650674	6168.7		61687 simplex 40x540 5 7 9	526,00	0,526	40 X 540	0,0194
689612	104030	6888.19		688819 odor trap 11/2x40 5 B 9	162,00	0,162	1 1/2 X 40	0,0060
691457	649968	6930.0		69300 equipment set 75 5 7 9	37,30	0,037	75	0,0014
691467	649975	6931.0		69310 equipment set 90 5 7 9	26,70	0,027	90	0,0010
691477	649982	6964.0		69640 equipment set 115 5 7 9	71,90	0,072	115	0,0027
691601	806132	6964.0		69640 equipment set 115 5 1K9	49,50	0,050	115	0,0018
691802	559991	6960.1	Tempoplex Plus	69601 Tempoplex Plus functional un5 B 9	387,00	0,387	50	0,0143
691847	560003	6960.0		69600 equipment set 112 0 7 9	333,50	0,334	112	0,0123
692107	226879	6929.29		692929 domoplex 90x40 5 7 9	267,00	0,267	90 X 40	0,0099
692372	193607	6929.1	Domoplex	69291 domoplex working comp. 85x405 B 9	299,00	0,299	85 X 40/50	0,0111
692402	279226	6929.21	Domoplex	692921 working component 85x40/50 5 C 9	285,00	0,285	85 X 40/50	0,0105
692452	294557	6928.175		6928175working component 70x40 5 B 9	224,00	0,224	70 X 40	0,0083
692542	130817	6928.1	Domoplex	69281 domoplex working comp. 70x405 B 9	273,00	0,273	70 X 40/50	0,0101
692612	140342	6928.0		69280 domoset 75 5 DW9	18,00	0,018	75	0,0007
692627	129583	6928.9		69289 domoplex 75x40 5 7 9	244,00	0,244	75 X 40	0,0090

Material no.	Item no.	Model no.	System name	Material short text	Mass in g	Mass in kg	Dimensions	Conversion factor
692927	208615	6929	Domoplex	6929 domoplex 90x40/50 5 7 9	413,00	0,413	90 X 40/50	0,0153
692987	126582	6928	Domoplex	6928 domoplex 75x40/50 5 7 9	295,00	0,295	75 X 40/50	0,0109
693112	279219	6928.21	Domoplex	692821 working component 70x40/50 5 C 9	248,00	0,248	70 X 40/50	0,0092
693682	101220	6931.45	Varioplex	693145 varioplex 40/50x70x120 0 7 9	410,00	0,410	40/50 X 70 X 120	0,0152
693742	133207	6932.495		6932495tube trap 11/2x40 0 7 9	529,00	0,529	1 1/2 X 40	0,0196
693792	103408	6933.89		693389 waste combination 40/50x70x10 7 9	301,00	0,301	40/50 X 70 X 120	0,0111
694017	108847	6955.7		69557 varioplex 70x40/50 0 7 9	250,00	0,250	70 X 40/50	0,0092
694131	116408	6955.8		69558 varioplex 80x40/50 0 7 9	396,00	0,396	80 X 40/50	0,0146
694393	318284	6956.1-253	Tempoplex	69561 upper part of housing 110x825SC 9	94,80	0,095	110 X 82	0,0035
694462	485870	6929.95		692995 domoplex 85x40 5 7 9	288,00	0,288	85 X 40	0,0106
694497	778941	6956.09		695609 equipment set VisignM3/R3 5 7 9	108,00	0,108	VISIGN M3/R3	0,0040
694747	446567	6957	Tempoplex	6957 drain valve 115x11/2 5 7 9	203,00	0,203	115 X 1 1/2	0,0075
694917	192730	6956.0		69560 Temposet 120 5 7 9	47,00	0,047	120	0,0017
695507	327460	6934	Duoplex	6934 duoplex 70x40/50 5 7 9	235,00	0,235	70 X 40/50	0,0087
695627	334390	6934.0	Duoplex	69340 duoset 70 5 7 9	45,00	0,045	70	0,0017
695702	334338	6934.1	Duoplex	69341 working component 70x40/50 5 B 9	193,00	0,193	70 X 40/50	0,0071
695723	378912	6956.4EX		69564EXTempoplex 40/50 5 7 9	380,00	0,380	40 / 50	0,0140
695807	364755	6928EX		6928EX domoplex 75x40/50 5 7 9	280,00	0,280	75 X 40/50	0,0104
695907	364786	6956EX		6956EX waste 120x40/50 5 7 9	375,00	0,375	120 X 40/50	0,0139
696052	560805	6960.0		69600 equipment set 112 5 DW9	45,00	0,045	112	0,0017
696061	560812	6960.0		69600 equipment set 112 5 1G9	40,00	0,040	112	0,0015
696091	560843	6960.0		69600 equipment set 112 5 LG9	55,00	0,055	112	0,0020
696167	578916	6960	Tempoplex Plus	6960 Tempoplex Plus 115x50 5 7 9	433,00	0,433	115 X 50	0,0160
696407	575601	6961	Tempoplex	6961 Tempoplex 115x40/50 5 7 9	400,00	0,400	115 X 40/50	0,0148
696432	575625	6961.1	Tempoplex	69611 tempoplex working comp. 40/55 B 9	355,00	0,355	40/50	0,0131
696507	703394	6961PL		6961PL Tempoplex 115x40/50 5 7 9	410,00	0,410	115 X 40/50	0,0152
696617	575618	6961.875		6961875Tempoplex 115x40 5 7 9	365,00	0,365	115 X 40	0,0135
696733	806354	6962.18		696218 tempoplex working comp. 40/55 499	264,00	0,264	40/50	0,0098
696827	801458	6963PL	Tempoplex	6963PL Tempoplex 115x40/50 5 7 9	388,00	0,388	115 X 40/50	0,0143
697107	598617	6961.6		69616 Tempoplex 112x40/50 5 7 9	464,00	0,464	112 X 40/50	0,0172
697972	793609	6961.5		69615 Tempoplex 13/4 5 B 9	418,00	0,418	1 3/4	0,0155
698347	581633	6958.99	Tempoplex	695899 dome 112 5 7 9	60,00	0,060	112	0,0022

Material no.	Item no.	Model no.	System name	Material short text	Mass in g	Mass in kg	Dimensions	Conversion factor
698882	442385	6958.0	Tempoplex	69580 Temposet 112 5 DW9	37,20	0,037	112	0,0014
742897	699765	6191.26		619126 Multiplex Trio Wp 725x40/50 5 7 9	1080,00	1,080	725 X 40/50	0,0399
745567	689018	6963.6		69636 Tempoplex 115x40/50 5 7 9	433,00	0,433	115 X 40/50	0,0160
759387	699055	6149.09		614909 equipment set - 5 7 9	38,50	0,039	-	0,0014
759477	699062	6167.09		616709 equipment set - 5 7 9	36,00	0,036	-	0,0013
759937	675462	6145.5	Multiplex Trio F	61455 Multiplex Trio F 725x40/50 5 7 9	1615,00	1,615	725 X 40/50	0,0597
759947	675479	6145.6	Multiplex Trio F	61456 Multiplex Trio F 1070x40/50 5 7 9	1712,00	1,712	1070 X 40/50	0,0633
759957	675486	6145.51		614551 Multiplex Trio F 725x40/50 5 7 9	1005,00	1,005	725 X 40/50	0,0372
759967	675493	6148.1	Multiplex Trio F	61481 Multiplex Trio F 40/50 5 7 9	1728,00	1,728	40/50	0,0639
761773	698089	6149.90		614990 supply piece - 5 C 9	38,00	0,038	-	0,0014
764873	690564	6145.193	Rotaplex Trio F	6145193valve cone - 5 C 9	15,00	0,015	-	0,0006
863312	627201	6143		6143 rotaplex operation unit 11/25 B 9	500,00	0,500	1 1/2 X 725	0,0185
868427	641498	6161.34		616134 multiplex trio 40/50 5 7 9	1070,00	1,070	40/50	0,0396
914532	294717	6887.19		688719 odor trap 11/2 5 B 9	217,00	0,217	1 1/2	0,0080

Drains for sinks, spouts and appliances

Material no.	Item no.	Model no.	System name	Material short text	Mass in g	Mass in kg	Dimensions	Conversion factor
365973	674465	3892		3892 hose 50x50/40x1000 5 C 9	191,00	0,191	50 X 50/40 X 1000	0,4897
379302	124786	3891		3891 drainage pipe 40x250 5 B 9	83,50	0,084	40 X 250	0,2141
379312	130220	3891		3891 drainage pipe 40x500 5 B 9	142,00	0,142	40 X 500	0,3641
379402	129514	3891		3891 drainage pipe 50x250 5 B 9	110,60	0,111	50 X 250	0,2836
379412	125691	3891		3891 drainage pipe 50x500 5 B 9	181,00	0,181	50 X 500	0,4641
379503	460761	3892		3892 hose 50x50/40x250 5 C 9	77,50	0,078	50 X 50/40 X 250	0,1987
379513	460778	3892		3892 hose 50x50/40x500 5 C 9	114,00	0,114	50 X 50/40 X 500	0,2923
379523	460785	3892		3892 hose 50x50/40x750 5 C 9	143,60	0,144	50 X 50/40 X 750	0,3682
502598	101299	5121.3		51213 universal valve 11/4x60(55) 5 C 9	65,00	0,065	1 1/4 X 60 (55)	0,1667
502712	111847	5121K		5121K universal valve 11/4x60(55) 5 B 9	63,50	0,064	1 1/4 X 60 (55)	0,1628
502732	122065	5121.05K		512105Kuniversal valve 11/4x60(80) 5 B 9	88,50	0,089	1 1/4 X 60 (80)	0,2269
503882	129392	5121.15K		512115Kuniversal valve 11/4x60(80) 5 B 9	96,00	0,096	1 1/4 X 60 (80)	0,2462
504882	119836	5125K		5125K universal valve 11/4x60(80) 5 B 9	58,50	0,059	1 1/4 X 60 (80)	0,1500
527987	613648	5420.9		54209 overflow pipe 63x113 5 7 9	60,00	0,060	63 X 113	0,1538
528287	671471	5420.1		54201 waste combination 11/4x60 5 7 9	398,00	0,398	1 1/4 X 60	1,0205
544357	103033	5692.1		56921 flange pipe 11/4x200 5 7 9	88,50	0,089	1 1/4 X 200	0,2269
555642	618865	5621.25		562125 connection bend 11/4x300 5 B 9	72,00	0,072	1 1/4 X 300	0,1846
556002	193508	5725V-542		5725V tube 32x200 5 B 9	26,50	0,027	32 X 200	0,0679
563952	699987	5725V-542		5725V tube 40x200 5 B 9	33,00	0,033	40 X 200	0,0846
571742	102579	5791-111		5791 outlet tube 32x220x680 5SB 9	131,00	0,131	32 X 220 X 680	0,3359
571782	123901	5791-111		5791 outlet tube 40x220x680 5SB 9	189,80	0,190	40 X 220 X 680	0,4867
571792	132774	5791-111		5791 outlet tube 32x220x750 5 B 9	138,00	0,138	32 X 220 X 750	0,3538
576462	135713	5815K		5815K waste combination 11/4x60x605 B 9	380,00	0,380	1 1/4 X 60 X 60	0,9744
576622	137328	5816		5816 waste combination 11/4x60 5 B 9	124,00	0,124	1 1/4 X 60	0,3179
587692	613280	5725V-542		5725V tube 32x250 5 B 9	33,10	0,033	32 X 250	0,0849
604962	167899	6165		6165 overflow tube 660x300 5 B 9	194,00	0,194	660 X 300	0,4974
608312	113124	6176-651		6176 overflow tube 220x180 5SB 9	77,00	0,077	220 X 180	0,1974
632172	133658	6311-803		6311 unit overflow - 5 B 9	65,00	0,065	-	0,1667
636852	719265	6162.99		616299 elbow 45°p. 40/50 5 B 9	58,00	0,058	40/50	0,1487
685481	123765	6835.1		68351 odor trap 11/4 0 1 9	270,00	0,270	1 1/4	0,6923
685491	117900	6835.1		68351 odor trap 11/2 0 1 9	428,30	0,428	1 1/2	1,0982

Material no.	Item no.	Model no.	System name	Material short text	Mass in g	Mass in kg	Dimensions	Conversion factor
689582	106263	6887.45		688745 odor trap 11/2x40/50 5 B 9	157,00	0,157	1 1/2 X 40/50	0,4026
689632	118662	6888.20		688820 odor trap 11/2x40 5 B 9	72,50	0,073	1 1/2 X 40	0,1859
689702	102326	6889		6889 odor trap 11/2x40/50 5 B 9	87,60	0,088	1 1/2 X 40/50	0,2246
690402	115432	6892		6892 flange pipe 11/4x40x120 5 B 9	33,50	0,034	1 1/4 X 40 X 120	0,0859
690422	107840	6892		6892 flange pipe 11/2x40x120 5 B 9	35,40	0,035	1 1/2 X 40 X 120	0,0908
690432	108731	6892		6892 flange pipe 11/2x50x120 5 B 9	42,00	0,042	1 1/2 X 50 X 120	0,1077
690442	118686	6892		6892 flange pipe 11/2x50x250 5 B 9	75,00	0,075	1 1/2 X 50 X 250	0,1923
690452	125400	6892		6892 flange pipe 11/4x40x200 5 B 9	50,40	0,050	1 1/4 X 40 X 200	0,1292
690462	106591	6892		6892 flange pipe 11/2x40x200 5 B 9	48,00	0,048	1 1/2 X 40 X 200	0,1231
690472	130534	6892		6892 flange pipe 2x40x200 5 B 9	69,75	0,070	2 X 40 X 200	0,1788
690482	136888	6892		6892 flange pipe 11/2x40x500 5 B 9	132,00	0,132	1 1/2 X 40 X 500	0,3385
690502	154424	6892		6892 flange pipe 2x50x500 5 B 9	174,00	0,174	2 X 50 X 500	0,4462
690562	121631	6892		6892 flange pipe 11/4x34x200 5 B 9	46,00	0,046	1 1/4 X 34 X 200	0,1179
690632	317232	6928.1-821	Domoplex	69281 unit siphon tube - 5 B 9	7,80	0,008	-	0,0200
690702	119188	6895		6895 tee - 5 B 9	41,60	0,042	-	0,1067
691242	754785	6995.1		69951 tee 32x32 5 B 9	52,00	0,052	32 X 32	0,1333
691722	582968	6960.99	Tempoplex Plus	696099 siphon tube 69,6 5 B 9	34,00	0,034	69,6	0,0872
691742	582982	6961.99	Tempoplex	696199 siphon tube - 5 B 9	26,00	0,026	-	0,0667
691942	290856	6928-821	Domoplex	6928 unit siphon tube - 5 B 9	12,43	0,012	-	0,0319
692417	446642	6928.5	Domoplex	69285 overflow pipe 100 5 7 9	55,00	0,055	100	0,1410
693272	111779	6927		6927 drain valve 85x40 5 B 9	160,50	0,161	85 X 40	0,4115
694292	177829	6956-632	Tempoplex	6956632siphon tube 53,8x69 5SB 9	17,00	0,017	53,8 X 69	0,0436
694362	318260	6956.1-821	Tempoplex	69561 unit siphon tube - 5 B 9	25,00	0,025	-	0,0641
698722	450229	6958.1-821	Tempoplex	69581 unit siphon tube 65,7 5 B 9	43,00	0,043	65,7	0,1103
702562	114336	7121K-971		7121K unit lower part of waste 11/5SB 9	30,60	0,031	1 1/2	0,0785
702633	107673	7121		7121 drain valve 11/2x80 3 3 9	179,50	0,180	1 1/2 X 80	0,4603
702653	117146	7121		7121 drain valve 2x80 3 3 9	198,00	0,198	2 X 80	0,5077
702692	117429	7121K		7121K drain valve 11/2x80 5 B 9	115,00	0,115	1 1/2 X 80	0,2949
702702	109516	7122K		7122K drain valve 11/2x80 5 B 9	119,00	0,119	1 1/2 X 80	0,3051
703602	109110	7122.05K		712205Kdrain valve 11/2x80 5 B 9	135,00	0,135	1 1/2 X 80	0,3462
703672	131012	7122.15K		712215Kdrain valve 11/2x80 5 B 9	148,50	0,149	1 1/2 X 80	0,3808
703752	675585	6162.8		61628 adapter 40/56 5 B 9	42,00	0,042	40/56	0,1077
706493	109967	7128		7128 drain valve 11/2x114,5 3 3 9	210,00	0,210	1 1/2 X 114,5	0,5385

Material no.	Item no.	Model no.	System name	Material short text	Mass in g	Mass in kg	Dimensions	Conversion factor
706662	325107	7128.4		71284 Waste and overflow comb. - 5 B 9	320,00	0,320	-	0,8205
709243	680688	7139.159		7139159strainer 82 3 3 9	56,50	0,057	82	0,1449
709253	680695	7139.169		7139169strainer 82 3 3 9	61,00	0,061	82	0,1564
710022	147266	7138.2		71382 waste combination 11/2x70 5 B 9	371,00	0,371	1 1/2 X 70	0,9513
710032	152550	7138.52		713852 waste combination 11/2x70 5 B 9	310,00	0,310	1 1/2 X 70	0,7949
710552	578886	7139.15		713915 waste set - 5 B 9	370,00	0,370	-	0,9487
710562	578893	7139.16		713916 waste set - 5 B 9	435,00	0,435	-	1,1154
732312	105624	7372		7372 drain valve 3/4x50 5 B 9	37,20	0,037	3/4 X 50	0,0954
732542	125523	7373.1		73731 drain valve 3/4x50 5 B 9	40,00	0,040	3/4 X 50	0,1026
733762	102678	7432		7432 drain valve 11/2x70 5 B 9	82,50	0,083	1 1/2 X 70	0,2115
733782	101961	7432.31		743231 drain valve 11/2x70 5 B 9	83,00	0,083	1 1/2 X 70	0,2128
733802	106140	7432.51		743251 drain valve 11/2x70 5 B 9	94,00	0,094	1 1/2 X 70	0,2410
738723	141059	7531-454	Varioplex	7531 upper part of waste 11/2 3T3 9	35,24	0,035	1 1/2	0,0904
740332	106058	7532		7532 drain valve 11/2x70 5 B 9	90,00	0,090	1 1/2 X 70	0,2308
742922	699864	7139.153		7139153waste set - 5 B 9	478,00	0,478	-	1,2256
742932	699871	7139.163		7139163waste set - 5 B 9	540,00	0,540	-	1,3846
744092	689025	7139.20		713920 waste connection - 5 B 9	203,00	0,203	-	0,5205
744102	108519	7622		7622 drain valve 11/2x70 5 B 9	90,00	0,090	1 1/2 X 70	0,2308
744122	104849	7622.31		762231 drain valve 11/2x70 5 B 9	92,00	0,092	1 1/2 X 70	0,2359
744142	109233	7622.51		762251 drain valve 11/2x70 5 B 9	99,50	0,100	1 1/2 X 70	0,2551
746102	340186	7463		7463 Waste and overflow comb. 11/5 B 9	398,00	0,398	1 1/2	1,0205
747522	678548	7139.151		7139151waste set - 5 B 9	445,00	0,445	-	1,1410
747532	678555	7139.152		7139152waste set - 5 B 9	438,00	0,438	-	1,1231
747542	678562	7139.161		7139161waste set - 5 B 9	505,00	0,505	-	1,2949
747552	678579	7139.162		7139162waste set - 5 B 9	505,00	0,505	-	1,2949
747581	678609	7139.19		713919 strainer 11/2 3 1 9	7,70	0,008	1 1/2	0,0197
759442	113063	792		792 waste connection 11/2x160-575 B 9	252,00	0,252	1 1/2 X 160-570	0,6462
759532	444853	792.3		7923 waste connection 11/2 5 B 9	265,00	0,265	1 1/2	0,6795
759902	125417	7929.11		792911 waste combination 11/2x40x165 B 9	633,00	0,633	1 1/2X40X160-570	1,6231
761532	104917	794		794 waste connection 11/2x11/2x85 B 9	164,00	0,164	1 1/2X1 1/2X80-310	0,4205
761602	122539	794.1		7941 waste connection 2x2x80-285 5 B 9	237,00	0,237	2 X 2 X 80-285	0,6077
761642	106966	791-880		791 unit outlet bend 11/2x40x2705 B 9	78,50	0,079	1 1/2 X 40 X 270	0,2013
761742	125110	791.14.12		7911412waste connection 11/2 5 B 9	564,00	0,564	1 1/2	1,4462

Material no.	Item no.	Model no.	System name	Material short text	Mass in g	Mass in kg	Dimensions	Conversion factor
762042	329174	79485.1		794851 waste combination 11/2x50 5 B 9	500,00	0,500	1 1/2 X 50	1,2821
762062	365875	79485.1		794851 waste combination 11/2x40 5 B 9	475,00	0,475	1 1/2 X 40	1,2179
762982	667368	7985.88V		798588Voutlet bend 50x250 5 B 9	110,00	0,110	50 X 250	0,2821
762992	667375	7985.88V		798588Voutlet bend 40x245 5 B 9	81,50	0,082	40 X 245	0,2090
763002	667382	7985.47V		798547Voutlet bend 40x245 5 B 9	79,15	0,079	40 X 245	0,2029
763342	696399	6963.99	Tempoplex	696399 siphon tube 39 5 B 9	18,00	0,018	39	0,0462
767342	144173	7981.31-697		798131 flange pipe 11/2x50x110 5 B 9	64,00	0,064	1 1/2 X 50 X 110	0,1641
767452	111168	7981.3-697		79813 flange pipe 11/2x50x110 5 B 9	52,50	0,053	1 1/2 X 50 X 110	0,1346
767472	139100	7981.3-697		79813 flange pipe 2x50x110 5 B 9	64,00	0,064	2 X 50 X 110	0,1641
767542	117153	7985.31-697		798531 flange pipe 11/2x40x200 5 B 9	83,70	0,084	1 1/2 X 40 X 200	0,2146
768002	104559	7985.50		798550 flange pipe 11/2x40x200 5 B 9	94,00	0,094	1 1/2 X 40 X 200	0,2410
768302	118426	7985.01-881		798501 unit outlet blend 90°x40x2205 B 9	110,00	0,110	90°X 40 X 220	0,2821
768602	115388	7985.30-697		798530 flange pipe 11/4x40x200 5 B 9	61,20	0,061	1 1/4 X 40 X 200	0,1569
768622	111045	7985.30-697		798530 flange pipe 11/2x40x200 5 B 9	77,80	0,078	1 1/2 X 40 X 200	0,1995
769152	104641	7987.570		7987570extension tube 40x250 5 B 9	64,00	0,064	40 X 250	0,1641
769342	106270	7988.5		79885 adapter piece 40x34 5 B 9	40,00	0,040	40 X 34	0,1026
770082	127985	7988.6		79886 adapter piece 40x34 5 B 9	50,38	0,050	40 X 34	0,1292
824242	100834	7462.71		746271 Waste and overflow comb. 11/5 B 9	176,00	0,176	1 1/2 X 70	0,4513
866682	107116	7823.42		782342 Waste and overflow comb. 11/5 B 9	346,00	0,346	1 1/2X70X100-270	0,8872
866692	109509	7823.52		782352 Waste and overflow comb. 11/5 B 9	355,00	0,355	1 1/2X70X100-270	0,9103
871761	559779	5422		5422 waste combination 63x35 3 1 9	835,00	0,835	63 X 35	2,1410
885002	108137	7870.52		787052 Waste and overflow comb. 11/5 B 9	485,00	0,485	1 1/2X70X170-330	1,2436
984722	128869	9758		9758 spacer wall 11/2x11/2x25 5 B 9	39,00	0,039	1 1/2 X 1 1/2 X 25	0,1000
985392	113971	7860.71		786071 Waste and overflow comb. 11/5 B 9	296,00	0,296	1 1/2 X 70 X 1 1/2	0,7590
985402	105785	7860.71-880		786071 unit outlet bend 11/2x11/2 5 B 9	124,00	0,124	1 1/2 X 1 1/2	0,3179

Drains for urinals

Material no.	Item no.	Model no.	Material short text	Mass in g	Mass in kg	Dimensions	Conversion factor
313757	108878	3227.132	3227132urinator ball 50x32(11/4) 0 7 9	270,00	0,270	50 X 32 (1 1/4)	0,5870
313792	654269	3233.4	32334 suction form piece 50x50x5 5 S 9	160,00	0,160	50 X 50 X 5	0,3478
313837	114794	3227.4	32274 outlet tube 32x500 0 7 9	246,00	0,246	32 X 500	0,5348
313847	135140	3227.4	32274 outlet tube 37x500 0 7 9	390,00	0,390	37 X 500	0,8478
314002	108212	3228	3228 connection bend 50x50 5 B 9	148,60	0,149	50 X 50	0,3230
314007	132644	3228	3228 connection bend 50x50 5 7 9	186,30	0,186	50 X 50	0,4050
316532	106249	3229	3229 connection stub 50x50x130 5 B 9	69,80	0,070	50 X 50 X 130	0,1517
316542	117610	3229	3229 connection stub 65x50x130 5 B 9	84,00	0,084	65 X 50 X 130	0,1826
317352	109271	3233	3233 suction form piece 50 5 B 9	217,00	0,217	50	0,4717
317402	104993	3233.1	32331 suction form piece 50 5 B 9	192,00	0,192	50	0,4174
317502	119430	3235	3235 suction form piece 50x50 5 B 9	518,00	0,518	50 X 50	1,1261
317752	492458	3233.8	32338 suction form piece 50 5 B 9	173,00	0,173	50	0,3761
317802	492465	3233.9	32339 suction form piece 50 5 S 9	162,00	0,162	50	0,3522

Drains for washbasins and bidets

Material no.	Item no.	Model no.	System name	Material short text	Mass in g	Mass in kg	Dimensions	Conversion factor
313787	120627	3227.2		32272 connection bend 32x100/100 0 7 9	115,00	0,115	32 X 100/100	0,1917
368312	150419	3741		3741 odor trap 110 5 B 9	800,00	0,800	110	1,3333
379007	107383	3894		3894 extension tube 28x125 0 7 9	50,60	0,051	28 X 125	0,0843
384641	130695	3932		3932 slotted valve 11/2x11/4x70x70 1 9	443,00	0,443	1 1/2X1 1/4X70X70	0,7383
384651	140359	3932		3932 slotted valve 2x11/2x80x70 0 1 9	661,00	0,661	2 X 1 1/2 X 80X70	1,1017
384857	129804	3932-667		3932 lower part of waste 11/2x70x0 7 9	304,00	0,304	1 1/2 X 70 X 40	0,5067
384897	152802	3932-667		3932 lower part of waste 2x80x70 0 7 9	530,00	0,530	2 X 80 X 70	0,8833
420197	208622	45.1-603		451 overflow pipe, complete 11/20 7 9	174,00	0,174	1 1/2 X 300	0,2900
422537	175108	45.1-603		451 overflow pipe, complete 11/20 7 9	197,00	0,197	1 1/2 X 350	0,3283
422807	132682	44.1-603		441 overflow pipe, complete 11/40 7 9	80,40	0,080	1 1/4 X 120	0,1340
422817	159108	44.1-603		441 overflow pipe, complete 11/40 7 9	90,00	0,090	1 1/4 X 140	0,1500
422827	147082	44.1-603		441 overflow pipe, complete 11/40 7 9	93,60	0,094	1 1/4 X 175	0,1560
422857	108861	44.1-603		441 overflow pipe, complete 11/40 7 9	123,80	0,124	1 1/4 X 250	0,2063
422907	123864	45.1-603		451 overflow pipe, complete 11/20 7 9	85,00	0,085	1 1/2 X 120	0,1417
422917	142193	45.1-603		451 overflow pipe, complete 11/20 7 9	93,40	0,093	1 1/2 X 140	0,1557
422927	145484	45.1-603		451 overflow pipe, complete 11/20 7 9	109,00	0,109	1 1/2 X 175	0,1817
422937	140045	45.1-603		451 overflow pipe, complete 11/20 7 9	119,20	0,119	1 1/2 X 200	0,1987
422947	148263	45.1-603		451 overflow pipe, complete 11/20 7 9	136,00	0,136	1 1/2 X 225	0,2267
422977	124915	45.1-603		451 overflow pipe, complete 11/20 7 9	145,00	0,145	1 1/2 X 250	0,2417
442507	115784	44.1		441 overflow pipe valve 11/4x60x0 7 9	335,00	0,335	1 1/4X60X70X120	0,5583
447407	109844	45-667		45 lower part of waste 11/4x60x0 7 9	218,00	0,218	1 1/4 X 60 X 70	0,3633
447417	132095	45-667		45 lower part of waste 11/4x70x0 7 9	207,00	0,207	1 1/4 X 70 X 40	0,3450
447447	126605	45-667		45 lower part of waste 11/2x70x0 7 9	311,00	0,311	1 1/2 X 70 X 70	0,5183
447457	116910	45-667		45 lower part of waste 11/2x70x0 7 9	235,00	0,235	1 1/2 X 70 X 40	0,3917
502606	129286	5121		5121 universal valve 11/4x60(55) 0 6A9	126,80	0,127	1 1/4 X 60 (55)	0,2113
502682	118679	5121		5121 universal valve 11/4x60(55) 0 2A9	120,00	0,120	1 1/4 X 60 (55)	0,2000
502753	100261	5121		5121 universal valve 11/4x60(55) 0 3 9	114,80	0,115	1 1/4 X 60 (55)	0,1913
503873	119393	5121.15		512115 universal valve 11/4x60(80) 3 3 9	155,50	0,156	1 1/4 X 60 (80)	0,2592
503929	310653	5121		5121 universal valve 11/4x60(55) 0 1G9	123,00	0,123	1 1/4 X 60 (55)	0,2050
504873	104337	5125		5125 universal valve 11/4x60 3 3 9	110,00	0,110	1 1/4 X 60	0,1833

Material no.	Item no.	Model no.	System name	Material short text	Mass in g	Mass in kg	Dimensions	Conversion factor
513337	113513	5212.1		52121 slotted valve 11/4x60x70 0 7 9	205,60	0,206	1 1/4 X 60 X 70	0,3427
514687	112936	5216.1		52161 slotted valve 11/4x60x70 0 7 9	200,00	0,200	1 1/4 X 60 X 70	0,3333
516097	102296	5222		5222 slotted valve 11/4x60x70 0 7 9	205,00	0,205	1 1/4 X 60 X 70	0,3417
516117	119003	5222.05		522205 slotted valve 11/4x70 0 7 9	224,00	0,224	1 1/4 X 70	0,3733
516157	111861	5222.1		52221 slotted valve 11/4x60x70 0 7 9	190,00	0,190	1 1/4 X 60 X 70	0,3167
517139	310554	5226.1		52261 slotted valve 11/4x60x70 0 1G9	176,80	0,177	1 1/4 X 60 X 70	0,2947
517482	131487	5226.1		52261 slotted valve 11/4x60x70 0 2A9	189,00	0,189	1 1/4 X 60 X 70	0,3150
517487	116637	5226.1		52261 slotted valve 11/4x60x70 0 7 9	186,00	0,186	1 1/4 X 60 X 70	0,3100
527007	433703	5413		5413 slotted valve 11/4x60x50 0 7 9	220,00	0,220	1 1/4 X 60 X 50	0,3667
527017	433710	5413		5413 slotted valve 11/4x60x80 0 7 9	350,00	0,350	1 1/4 X 60 X 80	0,5833
528017	492557	5430		5430 slotted waste Visign 1 11/4x0 7 9	374,00	0,374	1 1/4 X 63 X 75	0,6233
528027	492571	5430		5430 slotted waste Visign 1 11/4x0 7 9	325,00	0,325	1 1/4 X 63 X 50	0,5417
528057	492564	5431		5431 slotted waste Visign 1 11/4x0 7 9	355,00	0,355	1 1/4 X 63 X 75	0,5917
528067	492588	5431		5431 slotted waste Visign 1 11/4x0 7 9	297,10	0,297	1 1/4 X 63 X 50	0,4952
528107	492595	5432		5432 slotted waste Visign 1 11/4x0 7 9	335,80	0,336	1 1/4 X 63 X 75	0,5597
528157	492601	5433		5433 slotted waste Visign 1 11/4x0 7 9	330,00	0,330	1 1/4 X 63 X 75	0,5500
528607	492670	5438		5438 universal valve Visign V1 110 7 9	349,00	0,349	1 1/4 X 63	0,5817
528707	470081	5420		5420 bottle trap 11/4 5 7 9	187,50	0,188	1 1/4	0,3125
528757	492687	5439		5439 universal valve Visign V1 110 7 9	312,40	0,312	1 1/4 X 63	0,5207
528807	492793	5440		5440 universal valve VisignV2-11/0 7 9	389,20	0,389	VISIGN V2-1 1/4X63	0,6487
528857	492809	5441		5441 universal valve VisignV2-11/0 7 9	416,80	0,417	VISIGN V2-1 1/4X63	0,6947
528957	472528	5421		5421 bottle trap 11/4 5 7 9	322,00	0,322	1 1/4	0,5367
539067	126681	5611-101		5611 drain elbow 38x200 0A7 9	198,00	0,198	38 X 200	0,3300
539097	116828	5611-101		5611 drain elbow 32x175 0A7 9	101,00	0,101	32 X 175	0,1683
539117	105860	5611-101		5611 drain elbow 32x250 0A7 9	132,00	0,132	32 X 250	0,2200
539127	105594	5611-101		5611 drain elbow 32x300 0A7 9	152,00	0,152	32 X 300	0,2533
539277	116149	5611-147		5611 floor pipe 32x680 0A7 9	427,00	0,427	32 X 680	0,7117
539437	130978	5611.1-147		56111 floor pipe 38x680 0 7 9	674,00	0,674	38 X 680	1,1233
540087	305611	5611		5611 tube trap 11/4x11/4 0 7 9	340,00	0,340	1 1/4 X 1 1/4	0,5667
540097	123451	5611		5611 tube trap 11/4x11/2 0 7 9	556,00	0,556	1 1/4 X 1 1/2	0,9267
540107	122515	5611		5611 tube trap 11/2x11/2 0 7 9	561,00	0,561	1 1/2 X 1 1/2	0,9350

Material no.	Item no.	Model no.	System name	Material short text	Mass in g	Mass in kg	Dimensions	Conversion factor
540122	105952	5611K		5611K tube trap 11/4x32 5 B 9	200,00	0,200	1 1/4 X 32	0,3333
540171	818142	5611.5		56115 P-trap 11/4x11/4 0 1K9	442,40	0,442	1 1/4 X 1 1/4	0,7373
540287	125073	5611.0		56110 tube trap 11/4x11/4 0 7 9	255,00	0,255	1 1/4 X 1 1/4	0,4250
540307	121549	5611.0		56110 tube trap 11/2x11/2 0 7 9	432,40	0,432	1 1/2 X 1 1/2	0,7207
540312	406462	5611K		5611K tube trap 11/4x40 5 B 9	225,00	0,225	1 1/4 X 40	0,3750
540437	126162	5611.01		561101 drain elbow 32x175 0 7 9	152,00	0,152	32 X 175	0,2533
540457	119942	5611.01		561101 drain elbow 32x250 0 7 9	186,00	0,186	32 X 250	0,3100
540467	130848	5611.01		561101 drain elbow 32x300 0 7 9	211,40	0,211	32 X 300	0,3523
541037	138295	5611.23		561123 tube trap 11/4x32 0 7 9	276,40	0,276	1 1/4 X 32	0,4607
541077	109950	5611.02		561102 tube trap 11/4x11/4x240 0 7 9	594,00	0,594	1 1/4X1 1/4X240	0,9900
541097	121709	5611.03		561103 flange pipe 11/4x240 0 7 9	291,00	0,291	1 1/4 X 240	0,4850
541257	445577	5611.6		56116 P-trap 11/4x11/4 0 7 9	365,00	0,365	1 1/4 X 1 1/4	0,6083
541309	310226	5611.5		56115 P-trap 11/4x11/4 0 1G9	458,00	0,458	1 1/4 X 1 1/4	0,7633
541407	803803	5611.51		561151 tube trap 11/4x32 0 7 9	366,00	0,366	1 1/4 X 32	0,6100
541517	636364	5635.3		56353 odor trap 40/50 5 7 9	685,00	0,685	40 / 50	1,1417
541606	125165	5611.5		56115 P-trap 11/4x11/4 0 6A9	381,00	0,381	1 1/4 X 1 1/4	0,6350
541627	128883	5611.29		561129 tube trap 11/4x32 0 7 9	394,10	0,394	1 1/4 X 32	0,6568
541662	108939	5611.5		56115 P-trap 11/4x11/4 0 2A9	455,20	0,455	1 1/4 X 1 1/4	0,7587
541667	101572	5611.5		56115 P-trap 11/4x11/4 0 7 9	400,00	0,400	1 1/4 X 1 1/4	0,6667
541707	124823	5611.9		56119 tube trap 11/4x11/4x120 0 7 9	480,00	0,480	1 1/4X1 1/4X120	0,8000
541727	160906	5611.913		5611913tube trap 11/4x120 0 7 9	357,00	0,357	1 1/4 X 120	0,5950
541797	193638	5611.917		5611917tube trap 11/4x11/4 0 7 9	400,90	0,401	1 1/4 X 1 1/4	0,6682
541807	111298	5612		5612 tube trap 11/4x11/4x60 0 7 9	461,00	0,461	1 1/4 X 1 1/4 X 60	0,7683
541817	193645	5611.916		5611916tube trap 11/4x11/4 0 7 9	372,00	0,372	1 1/4 X 1 1/4	0,6200
541887	120696	5612.0		56120 tube trap 11/4x11/4 0 7 9	361,00	0,361	1 1/4 X 1 1/4	0,6017
541927	575588	5621.24		562124 outlet bend 11/4x350 0 7 9	224,00	0,224	1 1/4 X 350	0,3733
542332	804688	5634.15		563415 odor trap 11/4x32/40 5 B 9	236,00	0,236	1 1/4 X 32/40	0,3933
542407	364588	5635.5		56355 odor trap 40/50 5 7 9	230,00	0,230	40/50	0,3833
542502	364625	5636		5636 odor trap 40 5 B 9	157,00	0,157	40	0,2617
542567	553753	5633.1		56331 odor trap 11/4x50/40 5 7 9	568,00	0,568	1 1/4 X 50 / 40	0,9467
542602	364687	5636.1		56361 odor trap 40/50 5 B 9	179,00	0,179	40/50	0,2983
542712	553760	5633.2		56332 odor trap 11/4x50/40 5 DW9	456,00	0,456	1 1/4 X 50 / 40	0,7600
542807	369156	5635.1		56351 odor trap 40/50 5 7 9	1027,00	1,027	40 / 50	1,7117

Material no.	Item no.	Model no.	System name	Material short text	Mass in g	Mass in kg	Dimensions	Conversion factor
542867	369217	5635.2		56352 odor trap 40/50 5 7 9	1330,00	1,330	40 / 50	2,2167
542917	120573	5617		5617 tee 11/4x32x250 0 7 9	380,00	0,380	1 1/4 X 32 X 250	0,6333
542927	134914	5617.156		5617156tee 11/4x11/2 0 7 9	260,00	0,260	1 1/4 X 1 1/2	0,4333
543002	452452	5635.7		56357 odor trap 1x40/50 5 B 9	231,00	0,231	1 X 40/50	0,3850
543017	553777	5633.3		56333 odor trap 11/4x50/40 5 7 9	406,00	0,406	1 1/4 X 50/40	0,6767
543202	406486	5536		5536 tube trap 11/4x40 5 B 9	208,00	0,208	1 1/4 X 40	0,3467
543372	218980	5536		5536 tube trap 11/4x32 5 B 9	172,00	0,172	1 1/4 X 32	0,2867
543517	440152	5535.4		55354 tube trap 11/4x11/4 0 7 9	430,00	0,430	1 1/4 X 1 1/4	0,7167
543857	124663	5535		5535 tube trap 11/4x280 0 7 9	315,00	0,315	1 1/4 X 280	0,5250
543987	103781	5535		5535 tube trap 11/4x11/4 0 7 9	290,00	0,290	1 1/4 X 1 1/4	0,4833
544137	407230	5622.2		56222 outlet bend 11/4x32x255 0 7 9	194,56	0,195	1 1/4 X 32 X 255	0,3243
544327	119263	5621.1-880		56211 unit outlet bend 11/4x32 0 7 9	300,00	0,300	1 1/4 X 32	0,5000
544747	102647	5694		5694 extension tube 32x125 0 7 9	58,80	0,059	32 X 125	0,0980
544807	102371	5695		5695 pipe coupling 32 0 7 9	29,00	0,029	32	0,0483
544837	115524	5694.5		56945 extension tube 32x125 0 7 9	99,00	0,099	32 X 125	0,1650
547457	104627	5753-542		5753 tube 32x200 0A7 9	99,70	0,100	32 X 200	0,1662
547467	112240	5753-542		5753 tube 32x250 0A7 9	119,00	0,119	32 X 250	0,1983
547477	111113	5753-542		5753 tube 32x300 0A7 9	139,80	0,140	32 X 300	0,2330
547507	121730	5753-542		5753 tube 32x700 0A7 9	317,60	0,318	32 X 700	0,5293
550677	124731	5754-876		5754 unit flange pipe 11/4 0 7 8	109,20	0,109	1 1/4	0,1820
556202	108694	5725		5725 bottle trap 11/4x11/4 5 B 9	155,00	0,155	1 1/4 X 1 1/4	0,2583
556222	151560	5725		5725 bottle trap 11/4x11/2 5 B 9	190,00	0,190	1 1/4 X 1 1/2	0,3167
556252	119270	5725		5725 bottle trap 11/2x11/2 5 B 9	186,00	0,186	1 1/2 X 1 1/2	0,3100
556272	120764	5725.0		57250 bottle trap 11/4x11/4 5 B 9	125,00	0,125	1 1/4 X 1 1/4	0,2083
556282	130558	5725.0		57250 bottle trap 11/2x11/2 5 B 9	157,50	0,158	1 1/2 X 1 1/2	0,2625
556312	101992	5725.2		57252 bottle trap 11/4x11/4 5 B 9	111,50	0,112	1 1/4 X 1 1/4	0,1858
556322	137755	5725.2		57252 bottle trap 11/4x11/2 5 B 9	135,00	0,135	1 1/4 X 1 1/2	0,2250
556432	103149	5725.2		57252 bottle trap 11/2x11/2 5 B 9	135,00	0,135	1 1/2 X 1 1/2	0,2250
556512	109363	5725.911		5725911bottle trap 11/4x11/4 5 B 9	162,00	0,162	1 1/4 X 1 1/4	0,2700
556522	108991	5725.911		5725911bottle trap 11/2x11/2 5 B 9	198,00	0,198	1 1/2 X 1 1/2	0,3300
556542	110321	5725.912		5725912bottle trap 11/4x11/4 5 B 9	245,00	0,245	1 1/4 X 1 1/4	0,4083
556582	121907	5725.916		5725916bottle trap 11/2x11/2 5 B 9	289,00	0,289	1 1/2 X 1 1/2	0,4817
556622	112271	5725.94		572594 bottle trap 50x40 5 B 9	256,00	0,256	50 X 40	0,4267

Material no.	Item no.	Model no.	System name	Material short text	Mass in g	Mass in kg	Dimensions	Conversion factor
556972	137182	5726		5726 bottle trap 11/2x11/2 5 B 9	281,00	0,281	1 1/2 X 1 1/2	0,4683
557132	103927	5726		5726 bottle trap 11/4x11/4 5 B 9	196,00	0,196	1 1/4 X 1 1/4	0,3267
557142	309312	5726		5726 bottle trap 11/4x11/2 5 B 9	233,00	0,233	1 1/4 X 1 1/2	0,3883
557212	108014	5726.2		57262 bottle trap 11/4x11/4 5 B 9	162,00	0,162	1 1/4 X 1 1/4	0,2700
557222	102531	5726.0		57260 bottle trap 11/4x11/4 5 B 9	173,00	0,173	1 1/4 X 1 1/4	0,2883
557292	116842	5726.9		57269 bottle trap 11/4x250 5 B 9	202,00	0,202	1 1/4 X 250	0,3367
557322	335373	5726.51		572651 bottle trap 11/4x11/2 5 B 9	251,00	0,251	1 1/4 X 1 1/2	0,4183
557482	112752	5727.2		57272 bottle trap 11/2x40 5 B 9	171,00	0,171	1 1/2 X 40	0,2850
557492	366773	5727.3		57273 odor trap 11/4x11/4 5 B 9	221,00	0,221	1 1/4 X 1 1/4	0,3683
557522	326319	5727		5727 bottle trap 11/4x11/4 5 B 9	202,00	0,202	1 1/4 X 1 1/4	0,3367
557552	128913	5730		5730 bottle trap 11/4x32x220x250 5 B 9	200,00	0,200	1 1/4X32X220X250	0,3333
561221	818173	5753		5753 bottle trap 11/4x11/4 0 1K9	540,00	0,540	1 1/4 X 1 1/4	0,9000
561507	365868	5753.1		57531 bottle trap 11/4x300 0 7 9	590,00	0,590	1 1/4 X 300	0,9833
561657	100674	5753		5753 bottle trap 11/4x11/4 0 7 9	538,00	0,538	1 1/4 X 1 1/4	0,8967
561777	105082	5753.2		57532 bottle trap 11/4x11/4 0 7 9	411,00	0,411	1 1/4 X 1 1/4	0,6850
561947	125455	5753.02		575302 bottle trap 11/4x11/4x240 0 7 9	725,20	0,725	1 1/4X1 1/4X240	1,2087
561957	148355	5753.09		575309 bottle trap 11/4 0 7 9	820,00	0,820	1 1/4	1,3667
561977	132675	5753.771		5753771bottle trap 11/2x11/4 0 7 9	735,00	0,735	1 1/2 X 1 1/4	1,2250
562017	117764	5753.01		575301 outlet tube 32x200 0 7 9	132,00	0,132	32 X 200	0,2200
562037	132248	5753.01		575301 outlet tube 32x300 0 7 9	182,00	0,182	32 X 300	0,3033
562117	122157	5753.904		5753904bottle trap 11/4x120 0 7 9	550,00	0,550	1 1/4 X 120	0,9167
562147	106164	5753.0		57530 bottle trap 11/4x11/4 0 7 9	428,00	0,428	1 1/4 X 1 1/4	0,7133
562157	110147	5753.905		5753905bottle trap 11/4x120 0 7 9	562,00	0,562	1 1/4 X 120	0,9367
562327	102845	5754		5754 bottle trap 11/4x11/4 0 7 9	645,00	0,645	1 1/4 X 1 1/4	1,0750
562447	105631	5754.2		57542 bottle trap 11/4x11/4 0 7 9	475,80	0,476	1 1/4 X 1 1/4	0,7930
562677	102555	5754.0		57540 bottle trap 11/4x11/4 0 7 9	535,00	0,535	1 1/4 X 1 1/4	0,8917
562787	115647	5754.905		5754905bottle trap 11/4x11/4 0 7 9	651,00	0,651	1 1/4 X 1 1/4	1,0850
562807	366681	5755		5755 bottle trap 11/4x11/4 0 7 9	653,00	0,653	1 1/4 X 1 1/4	1,0883
562827	456580	5756		5756 bottle trap 11/4x150 0 7 9	695,00	0,695	1 1/4 X 150	1,1583
562857	366704	5755.0		57550 bottle trap 11/4x11/4 0 7 9	531,00	0,531	1 1/4 X 1 1/4	0,8850
562927	114619	5555		5555 bottle trap 11/4x11/4x200 0 7 9	496,00	0,496	1 1/4X1 1/4X200	0,8267
562987	111786	5555.2		55552 bottle trap 11/4x11/4 0 7 9	375,00	0,375	1 1/4 X 1 1/4	0,6250
563097	116941	5555		5555 bottle trap 11/4x11/4x250 0 7 9	515,00	0,515	1 1/4X1 1/4X250	0,8583

Material no.	Item no.	Model no.	System name	Material short text	Mass in g	Mass in kg	Dimensions	Conversion factor
563102	120337	5555K		5555K bottle trap 11/4x11/4 5 B 9	145,00	0,145	1 1/4 X 1 1/4	0,2417
563212	104023	5555.2K		55552K bottle trap 11/4x11/4 5 B 9	102,00	0,102	1 1/4 X 1 1/4	0,1700
565011	701369	5698		5698 elbow 32x32x45° 1 7 9	116,20	0,116	32 X 32 X 45°	0,1937
565217	114213	5763		5763 bottle trap 11/4x11/2 0 7 9	768,00	0,768	1 1/4 X 1 1/2	1,2800
565227	125844	5763		5763 bottle trap 11/2x11/2 0 7 9	713,00	0,713	1 1/2 X 1 1/2	1,1883
565377	133344	5763.2		57632 bottle trap 11/4x11/2 0 7 9	550,00	0,550	1 1/4 X 1 1/2	0,9167
565387	133122	5763.2		57632 bottle trap 11/2x11/2 0 7 9	612,00	0,612	1 1/2 X 1 1/2	1,0200
566547	127619	5764.0		57640 bottle trap 11/2x11/2 0 7 9	786,10	0,786	1 1/2 X 1 1/2	1,3102
566762	703110	5726PL		5726PL bottle trap 11/4x11/4 5 B 9	201,00	0,201	1 1/4 X 1 1/4	0,3350
566852	703219	5725PL		5725PL bottle trap 11/4x11/4 5 B 9	151,00	0,151	1 1/4 X 1 1/4	0,2517
566887	703240	5633.1PL		56331PLodor trap 11/4x50/40 5 7 9	584,00	0,584	1 1/4 X 50 / 40	0,9733
566912	703288	5555KPL		5555KPLbottle trap 11/4x11/4 5 B 9	145,00	0,145	1 1/4 X 1 1/4	0,2417
566992	703349	5727PL		5727PL bottle trap 11/4x11/4 5 B 9	194,00	0,194	1 1/4 X 1 1/4	0,3233
567013	703356	5125PL		5125PL universal valve 11/4x60 3 3 9	110,00	0,110	1 1/4 X 60	0,1833
567023	703363	5121PL		5121PL universal valve 11/4x60(55) 3 3 9	116,50	0,117	1 1/4 X 60 (55)	0,1942
567907	126391	5763-542		5763 tube 40x200 0 7 9	112,40	0,112	40 X 200	0,1873
567937	143954	5763-542		5763 tube 40x400 0 7 9	231,80	0,232	40 X 400	0,3863
571847	335199	5792-111		5792 outlet tube 32x220x750 0 7 9	472,00	0,472	32 X 220 X 750	0,7867
571867	127930	5792-111		5792 outlet tube 32x130x250 0 7 9	205,00	0,205	32 X 130 X 250	0,3417
571887	114718	5792-111		5792 outlet tube 32x220x250 0 7 9	248,00	0,248	32 X 220 X 250	0,4133
571927	110710	5792-111		5792 outlet tube 32x220x580 0 7 9	379,00	0,379	32 X 220 X 580	0,6317
571957	102654	5792-111		5792 outlet tube 32x220x680 0 7 9	436,00	0,436	32 X 220 X 680	0,7267
571977	125424	5792-111		5792 outlet tube 40x220x580 0 7 9	608,00	0,608	40 X 220 X 580	1,0133
571987	136376	5792-111		5792 outlet tube 40x220x680 0 7 9	694,00	0,694	40 X 220 X 680	1,1567
573857	639969	5755.4		57554 bottle trap 11/4x250 0 7 9	670,00	0,670	1 1/4 X 250	1,1167
573862	639976	5725.4		57254 bottle trap 11/4x250 5 B 9	163,00	0,163	1 1/4 X 250	0,2717
576407	317003	5815.586		5815586waste combination 11/4x60 0 7 9	385,00	0,385	1 1/4 X 60	0,6417
578007	440190	5788	Eleganta	5788 Eleganta 1 11/4 0 7 9	780,00	0,780	1 1/4	1,3000
578877	492489	5788.4	Eleganta Set	57884 Eleganta Set 1 11/4 0 7 9	1275,40	1,275	1 1/4	2,1257
579007	595289	5788.70	Eleganta	578870 outlet tube 32x460 0 7 9	229,00	0,229	32 X 460	0,3817
588224	117788	5973		5973 tube 11/4x32 0 4 9	152,00	0,152	1 1/4 X 32	0,2533
588234	119379	5973		5973 tube 11/2x40 0 4 9	128,00	0,128	1 1/2 X 40	0,2133
684783	827106	9945-143		9945 flanged tube 32x300 0 1K9	140,00	0,140	32 X 300	0,2333

Material no.	Item no.	Model no.	System name	Material short text	Mass in g	Mass in kg	Dimensions	Conversion factor
696532	703417	5536PL		5536PL tube trap 11/4x11/4 5 B 9	174,00	0,174	1 1/4 X 1 1/4	0,2900
703191	103385	7122		7122 drain valve 11/2x80 0 1 9	190,00	0,190	1 1/2 X 80	0,3167
703211	116354	7122		7122 drain valve 2x80 0 1 9	208,50	0,209	2 X 80	0,3475
703691	120177	7122.15		712215 drain valve 11/2x80 0 1 9	226,00	0,226	1 1/2 X 80	0,3767
740247	704872	5611IN		5611IN tube trap 11/4x300 0 7 9	542,80	0,543	1 1/4 X 300	0,9047
748952	694159	7985.17		798517 tube trap 11/2x40/50 5 B 9	296,50	0,297	1 1/2 X 40/50	0,4942
748962	694166	7985.32		798532 tube trap 11/2x50 5 B 9	273,00	0,273	1 1/2 X 50	0,4550
755777	240554	45.1-603		451 overflow pipe, complete 11/20 7 9	159,00	0,159	1 1/2 X 275	0,2650
755787	237363	45.1-603		451 overflow pipe, complete 11/20 7 9	187,00	0,187	1 1/2 X 325	0,3117
755892	126032	7721		7721 overflow pipe valve 11/2x70x0 7 9	171,50	0,172	1 1/2 X 70 X 140	0,2858
758837	131104	792-111		792 outlet tube 32x39x680 0A7 7	394,00	0,394	32 X 39 X 680	0,6567
758957	140465	792-111		792 outlet tube 40x65x580 0A7 9	510,00	0,510	40 X 65 X 580	0,8500
759772	124205	7928.520		7928520waste combination 11/2x40x165 B 9	479,00	0,479	1 1/2X40X160-570	0,7983
759792	119744	7928.5		79285 waste combination 11/2x40x165 B 9	450,00	0,450	1 1/2X40X160-570	0,7500
759812	140977	7929.12		792912 waste connection 11/2x40x1605 B 9	434,00	0,434	1 1/2X40X160-570	0,7233
761712	110895	791.14		79114 drain valve 11/2x40 5 B 9	275,00	0,275	1 1/2 X 40	0,4583
761902	109585	79485.20		7948520waste connection 11/2x40x90-5 B 9	335,00	0,335	1 1/2 X 40 X90-310	0,5583
761922	107147	79485.20		7948520waste connection 11/2x50x90-5 B 9	355,00	0,355	1 1/2 X 50 X90-310	0,5917
761952	108496	79485		79485 waste connection 11/2x40x90-5 B 9	322,00	0,322	1 1/2 X 40 X90-310	0,5367
761962	110536	79485		79485 waste connection 11/2x50x90-5 B 9	345,00	0,345	1 1/2 X 50 X90-310	0,5750
766495	779726	K5611K		K5611K tube trap 11/4x32 5 B 9	190,00	0,190	1 1/4 X 32	0,3167
766513	779733	K5635.7		K56357 odor trap 1x40/50 5 B 9	220,00	0,220	1 X 40/50	0,3667
766902	779740	K7985		K7985 tube trap 11/4x40 5 B 9	195,00	0,195	1 1/4 X 40	0,3250
766913	779757	K7985		K7985 tube trap 11/2x40 5 B 9	200,00	0,200	1 1/2 X 40	0,3333
766918	779764	K7985		K7985 tube trap 11/2x50 5 B 9	220,00	0,220	1 1/2 X 50	0,3667
767422	109349	7981.2		79812 tube trap 50x50 5 B 9	250,00	0,250	50 X 50	0,4167
767492	107253	7981.3		79813 tube trap 11/2x50 5 B 9	305,00	0,305	1 1/2 X 50	0,5083
767582	127978	7985		7985 tube trap 11/4x40 5 B 9	195,00	0,195	1 1/4 X 40	0,3250
767782	105716	7985		7985 tube trap 11/2x40 5 B 9	200,00	0,200	1 1/2 X 40	0,3333
767792	107888	7985		7985 tube trap 11/2x50 5 B 9	220,00	0,220	1 1/2 X 50	0,3667
767812	279394	7985.217		7985217tube trap 11/2x40 5 B 9	219,00	0,219	1 1/2 X 40	0,3650

Material no.	Item no.	Model no.	System name	Material short text	Mass in g	Mass in kg	Dimensions	Conversion factor
768042	129125	7985.60		798560 tube trap 11/2x40 5 B 9	285,00	0,285	1 1/2 X 40	0,4750
768052	129279	7985.60		798560 tube trap 11/2x50 5 B 9	328,00	0,328	1 1/2 X 50	0,5467
768102	111489	7985.70		798570 tube trap 11/2x40 5 B 9	313,00	0,313	1 1/2 X 40	0,5217
768112	109400	7985.70		798570 tube trap 11/2x50 5 B 9	366,00	0,366	1 1/2 X 50	0,6100
768142	115449	7985.20		798520 tube trap 11/4x50 5 B 9	233,00	0,233	1 1/4 X 50	0,3883
768482	113957	7985.20		798520 tube trap 11/4x40 5 B 9	230,00	0,230	1 1/4 X 40	0,3833
768502	104634	7985.20		798520 tube trap 11/2x40 5 B 9	228,00	0,228	1 1/2 X 40	0,3800
768512	102821	7985.20		798520 tube trap 11/2x50 5 B 9	234,00	0,234	1 1/2 X 50	0,3900
768542	115654	7985.20		798520 tube trap 2x50 5 B 9	254,00	0,254	2 X 50	0,4233
768652	118242	7985.30		798530 tube trap 11/4x50 5 B 9	256,00	0,256	1 1/4 X 50	0,4267
768662	101800	7985.30		798530 tube trap 11/2x40 5 B 9	269,00	0,269	1 1/2 X 40	0,4483
768672	101206	7985.30		798530 tube trap 11/2x50 5 B 9	268,00	0,268	1 1/2 X 50	0,4467
768692	116668	7985.30		798530 tube trap 2x50 5 B 9	274,00	0,274	2 X 50	0,4567
768722	114596	7985.30		798530 tube trap 11/4x40 5 B 9	243,00	0,243	1 1/4 X 40	0,4050
768772	279387	7985.317		7985317tube trap 11/2x40 5 B 9	261,00	0,261	1 1/2 X 40	0,4350
768972	121365	7985.817		7985817tube trap 11/2x40 5 B 9	245,00	0,245	1 1/2 X 40	0,4083
769052	114640	7985.94		798594 tube trap 50x50 5 B 9	303,00	0,303	50 X 50	0,5050
769062	104047	7985.80		798580 tube trap 40 5 B 9	284,00	0,284	40	0,4733
769072	102593	7985.80		798580 tube trap 50 5 B 9	297,00	0,297	50	0,4950
769142	117771	7985.94		798594 tube trap 50x40 5 B 9	290,00	0,290	50 X 40	0,4833
769202	113698	7985.945-639		7985945hopper 40x240 5 B 9	136,50	0,137	40 X 240	0,2275
769302	102449	7985.10		798510 tube trap 11/2x40 5 B 9	234,00	0,234	1 1/2 X 40	0,3900
769312	102838	7985.10		798510 tube trap 11/2x50 5 B 9	252,00	0,252	1 1/2 X 50	0,4200
769362	111809	7985.945		7985945tube trap 40 5 B 9	298,00	0,298	40	0,4967
769372	105181	7985.945		7985945tube trap 50 5 B 9	309,00	0,309	50	0,5150
769422	119607	7985.117		7985117tube trap 11/2x40 5 B 9	201,00	0,201	1 1/2 X 40	0,3350
769502	120054	7985.09		798509 waste connection 11/2x40 5 B 9	467,00	0,467	1 1/2 X 40	0,7783
769532	101633	7985.15		798515 tube trap 11/2x40/50 5 B 9	280,00	0,280	1 1/2 X 40/50	0,4667
770072	127848	7985.018		7985018tube trap 40 5 B 9	189,00	0,189	40	0,3150
796932	604295	7985.7		79857 tube trap 11/2x50x700 5 B 9	474,00	0,474	1 1/2 X 50 X 700	0,7900
800152	104429	7850		7850 space maker Pipe odour trap 5 B 9	333,00	0,333	1 1/2 X 40	0,5550
800162	104054	7850		7850 space maker Pipe odour trap 5 B 9	357,00	0,357	1 1/2 X 50	0,5950
800242	134099	7850.917		7850917tube trap 11/2x40 5 B 9	359,00	0,359	1 1/2 X 40	0,5983

Material no.	Item no.	Model no.	System name	Material short text	Mass in g	Mass in kg	Dimensions	Conversion factor
804012	641696	9724.4		97244 odor trap 11/4x32 5 B 9	354,00	0,354	1 1/4 X 32	0,5900
866182	606220	5729		5729 tube trap 11/4x32 5 B 9	279,00	0,279	1 1/4 X 32	0,4650
866192	606237	5729		5729 tube trap 11/4x40 5 B 9	310,00	0,310	1 1/4 X 40	0,5167
914502	120719	6887.1		68871 odor trap 11/2x40 5 B 9	120,00	0,120	1 1/2 X 40	0,2000
988367	171353	9945		9945 flanged tube 32x250 0 7 9	127,40	0,127	32 X 250	0,2123
988387	117382	9945		9945 flanged tube 32x200 0 7 9	106,00	0,106	32 X 200	0,1767
988397	137106	9945		9945 flanged tube 32x300 0 7 9	149,00	0,149	32 X 300	0,2483
988557	100599	9945-143		9945 flanged tube 32x200 0 7 9	94,00	0,094	32 X 200	0,1567
988567	101480	9945-143		9945 flanged tube 32x250 0 7 9	114,20	0,114	32 X 250	0,1903
988572	125813	9945-143		9945 flanged tube 32x300 0 2A9	141,00	0,141	32 X 300	0,2350
988577	102203	9945-143		9945 flanged tube 32x300 0 7 9	136,00	0,136	32 X 300	0,2267
988597	128326	9945-143		9945 flanged tube 32x500 0 7 9	224,80	0,225	32 X 500	0,3747
988627	121587	9945-143		9945 flanged tube 32x75 0 7 9	35,50	0,036	32 X 75	0,0592
988689	310011	9945-143		9945 flanged tube 32x300 0 1G9	153,20	0,153	32 X 300	0,2553
988737	142766	9945-143		9945 flanged tube 38x300 0 7 9	236,60	0,237	38 X 300	0,3943
988807	131388	9945-143		9945 flanged tube 40x300 0 7 9	250,00	0,250	40 X 300	0,4167
988846	141493	9945-143		9945 flanged tube 32x300 0 6A9	147,00	0,147	32 X 300	0,2450
992972	307721	97512		97512 odor trap 11/4x40 5 B 9	370,00	0,370	1 1/4 X 40	0,6167
998937	670856	9945-143		9945 flanged tube 32x120 0 7 9	56,00	0,056	32 X 120	0,0933
998947	670863	9945-143		9945 flanged tube 32x150 0 7 9	70,00	0,070	32 X 150	0,1167

Electronic mixing unit

Material no.	Item no.	Model no.	System name	Material short text	Mass in g	Mass in kg	Dimensions	Conversion factor
614017	662295	6146	Multiplex Trio E	6146 Multiplex Trio E - 0 7 9	6275,00	6,275	-	3,5653
614041	788476	6146.39	Multiplex Trio E	614639 battery - 5 A 9	435,00	0,435	-	0,2472
614067	662332	6146.20	Multiplex Trio E	614620 control element 65x65 0 7 9	380,00	0,380	65 X 65	0,2159
614087	662851	6146.90	Multiplex Trio E	614690 Mixed unit 65x65 0 7 9	4820,00	4,820	65 X 65	2,7386
614531	671082	6146.35	Multiplex Trio E	614635 battery 12V/0,8Ah 5 1A9	400,00	0,400	12V/0,8AH	0,2273
615317	682972	6146.2	Multiplex Trio E2	61462 Multiplex Trio E 2 0 7 9	6620,00	6,620	2	3,7614
615364	684600	6146.210	Multiplex Trio E2/E3	6146210control element 55 0 199	376,00	0,376	55	0,2136
615384	684624	6146.212	Multiplex Trio E2/E3	6146212turning knob 55 0 199	66,00	0,066	55	0,0375
615414	684648	6146.214	Multiplex Trio E2	6146214Mixed unit 250x180 S Z 9	4770,00	4,770	250 X 180	2,7102
615427	684655	6146.215	Multiplex Trio E3	6146215Multiplex Trio E 3 0 7 9	7005,00	7,005	3	3,9801
615434	684679	6146.216	Multiplex Trio E3	6146216control element 55 0 7 9	448,00	0,448	55	0,2545
615444	684686	6146.217	Multiplex Trio E3	6146217Mixed unit 250x180 0 Z 9	5012,00	5,012	250 X 180	2,8477

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Notes

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